

2009 Madison Village Comprehensive Plan



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1 Envisioning Madison Village

1.1 Vision statement

Madison Village seeks to balance the preservation of its semi-rural character with the accommodation of new growth and development and downtown revitalization while creating a desirable community with a positive and unique character. Through this comprehensive plan, Madison Village will implement land use policies that protect its natural resources, capitalizes on its proximity to I-90, ensures new development is carefully integrated into the semi-rural landscape, mandate high aesthetic standards in the Village downtown, support sustainable economic development, and promote innovative and sound planning practice.

1.2 Why a comprehensive plan?

A comprehensive plan is a land use document that provides the framework and policy direction for land use decisions and other actions affecting the physical, economic, and social aspects of the community. It indicates in a general way how local government leaders want the community to develop in the future.

The basic characteristics of a comprehensive plan are that it is general and farreaching. Another defining characteristic is that the plan is long-range and provides a base from which to make decisions.

The adoption of a comprehensive plan often becomes the driving force behind the creation of a more targeted plan. Examples of more targeted plans would include a historic preservation plan for the village center, or a plan for traffic calming at the I-90 exit.

The Madison Village Comprehensive Plan is a major planning effort to guide the community toward what it will be like in the future as a place to live, work, visit and invest. It is being developed through an open, participatory process driven by four broad-reaching questions:

- 1. Where are we now?
- 2. Where are we going?
- 3. Where do we want to be?
- 4. How do we get there?

The comprehensive plan will identify a vision and broadly address the elements that build a community including transportation, housing, open space and natural resources, sense of place, government services, the impacts of new developments and more.

The Comprehensive Plan serves as the village "to do" list, at least with regards to land use and the built environment, for the near future. Through goal setting, it will set priorities about land use, economic development, cultural and natural resources, transportation and other areas.

The Comprehensive Plan will not propose specific lot-by-lot locations for land uses or facilities, or address detailed regulations. A comprehensive plan is not a zoning resolution or subdivision regulation. However, such regulations are used as tools for implementing the Comprehensive Plan. The Comprehensive Plan is intended to provide the legal and rational framework for regulations, investments, and government action.

1.3 Comprehensive planning process

Urban planners have used some form of the planning process since the inception of the planning profession. Long ago, Patrick Geddes advocated a three-step procedure: survey, analysis, plan.

Today, most planners use a planning process called the rational model. The rational model usually takes the following form:

- 1. Identify issues and options.
- 2. State goals and objectives; identify priorities.
- 3. Collect and interpret data.
- 4. Prepare plans.
- 5. Draft programs for plan implementation.
- 6. Evaluate potential impacts of plans and implementing programs, and modify the plans accordingly.
- 7. Review and adopt plans.
- 8. Review and adopt implementation programs.
- 9. Administer plan-implementing programs, monitor their impacts, and amend plans in response to feedback.

A very important part of the planning process is public participation; that those who live, work and own businesses and nurseries in the village have a role in charting its future. Meetings were held with residents and community leaders throughout 2005 and 2008, to solicit thoughts about the state of the built environment in the village, and the direction in which it should be heading.

The planning process is not finished with the completion of the steps described above. Collecting and analyzing information and implementing comprehensive plans is an ongoing process. Policy statements require occasional revision to respond to new conditions; long-range goals need periodic review. The planning process is a continuous program for keeping the plans of a community current and relevant, and the implementation programs fair and effective. It is important to review plans on a regular basis, and keep them up to date. Good planning practice recommends major review and revision of a comprehensive plan every five to seven years.

The Comprehensive Plan is a flexible planning tool that is not carved in stone. While the plan presents goals and policies to be pursued, future events, broad changes in community values, or the availability of financing could cause village leaders and residents to focus on other goals. However, it is good civic stewardship to ensure that revisions conform to the spirit of the plan and sound planning principles, and consider the best interest of the community as a whole.

1.4 Plan organization

Each element contains at least two parts: a narrative description of current conditions (often called an inventory) and possible courses of action for the town; and formal goals and policies. To permit flexibility in implementing the plan, specific implementation steps are usually not included with individual goals and policies.

The formal plan introduction, in the next chapter, describes the history, geography and geology of Madison Village, along with a description of the challenges faced by the village. The demographics element describes attributes of the village population, how it has changed through the years, and how it may change in the future. The land use element describes the role of the built environment on the village, how land is being used, and the importance of creating and maintaining a unique sense of place. The transportation element describes the transportation system in the village; not just considering motor vehicles, but also bicycles and pedestrians. The housing element describes home ownership and tenure trends, and addresses challenges such as affordable housing. The public facilities element describes all public land uses – public safety facilities, schools, parks and open space – and discusses future needs. The utilities element describes the role that utilities play in shaping the built environment of the village. The economic development element describes the business environment of the village, and policies intended to maintain a diverse tax base and reduce the tax burden on residents, while preserving rural character. The natural resources element describes the features of the village built not by man, but by nature and ways to protect those gifts in the face of population growth.

1.5 Relation to adopted regional plans

Since Madison Village is a home-rule community, its comprehensive plan is not considered an amendment to the Lake County Comprehensive Plan. Regional plans from the Northeast Ohio Area Coordinating Agency (NOACA), the regional council of governments (COG) that guides transportation planning in the Cleveland metropolitan area, are also reflected in this plan.

1.6 Plan highlights

The following map represents a general overview of the zoning and transportation strategies developed in this plan. The plan is a guide for Madison Village leaders in developing practical and feasible zoning and land use decisions. This is not the official zoning map, rather a potential blueprint to visit during future development, redevelopment or strategic planning discussions.

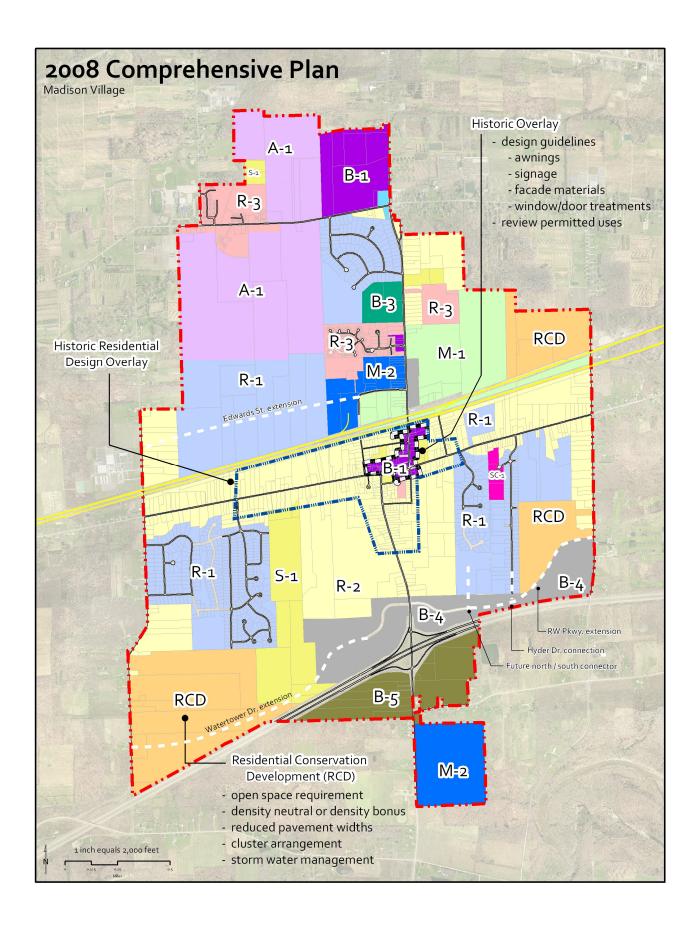
Continued cooperation between various boards, citizens, zoning staff, elected officials and other public entities will increase the likelihood of the plan's success. The recommendations of this plan were created by the Lake County Planning Commission with valuable input from the plan committee, community stakeholders and Village staff.

Market demands, unforeseen development scenarios or legal issues may arise which require edits to various portions of this plan. Planning is fluid. Amendments, if necessary, should not derail the overall objective of the plan:

The Comprehensive Plan map indicates the long-term land use strategy discussed in this plan. Each idea is discussed in detail in subsequent chapters of the plan. Key components include:

- Maintain and reinforce the historic downtown through improved design standards.
- Maintain a mix of land uses and encourage agricultural uses as a key industry to the Village.
- Promote commercial expansion along the I-90 corridor (Watertower Dr. and RW Parkway).
- Encourage road expansion and connectivity to existing street network.
- Creation of a Residential Conservation Development zone to permit single family development with key provision for environment variable of the site.

"It's not the plan that's important, it's the planning" Dr. Gramme Edwards



2 Introducing Madison Village

2.1 History

Madison Township was organized in 1811. At 45 square miles, it was the largest township in the new State of Ohio. At the center of Madison Township was Chapintown, one of the earliest settlements in what was to later become Lake County. In 1840, Chapintown had three stores, two churches and eighty houses. Chapintown would later be known as Centreville. In 1867, Centreville was incorporated as Madison Village.

Industry played a very important role in the early growth of the Madison area. In 1830, there were six distilleries, a carding mill, a cloth dressing and woolen mill, a chair factory and four tanneries.

Iron ore was found in abundance in the bogs near the beach ridges in 1825. In 1831 Arcole, at the intersection of what is now US 20 and Dock Road, was the site of the largest industrial plant in the state, two blast furnaces employing 2,000 ironworkers. The ore was nearly depleted by 1850, when charcoal prices rose and the iron industry disappeared.

The first nurseries in the Madison area were established in the 1870s.

Since its founding, Madison Village was on the major route connecting Cleveland and Buffalo. An early stage coach route went directly through the village. During the Civil War, the area had many Underground Railroad stations, and history tells of many escaped slaves who passed through the region. Railroads arrived in Lake County in the mid-19th century, with two lines passing through Madison Village. The Cleveland, Painesville and Eastern interurban railroad provided passenger service to Madison Village until it was abandoned in 1926. Interstate 90 was planned in the 1930s as part of a transcontinental superhighway system; it finally opened for traffic in 1960.

2.2 Geography and geology

Madison Village is a 4.78 square mile village located in the center of Madison Township, at the far eastern end of Lake County, about 40 miles from downtown Cleveland. In the past, Madison Village had little orientation towards greater Cleveland. The 1962 plan stated "Metropolitan Cleveland is found to have little effect upon Madison Village. In actuality, few Madison residents commute father than Painesville or Ashtabula for job opportunities, business and government activities, shopping and social or cultural recreation." However, the presence of Interstate 90 and growth of commercial and industrial centers in Beachwood, Mayfield Village and Mentor have drawn commuters to the area, attracted by the small town and semi-rural environment. Madison Village is a 30 to 45 minute drive to office parks along Interstate 271 in Cuyahoga County, and Laketran provides express bus service to downtown Cleveland.

The village is in the Lake Plain physiographic region of Ohio. The greatest geological influence on the area is the former post-glacial Lake Erie. This area was highly glaciated during the last ice age. The northern village boundary, at about 700 feet above sea level, is between Middle Ridge Road and North Ridge Road (US 20), both named for the sandy beach ridge left by the last prehistoric lake.

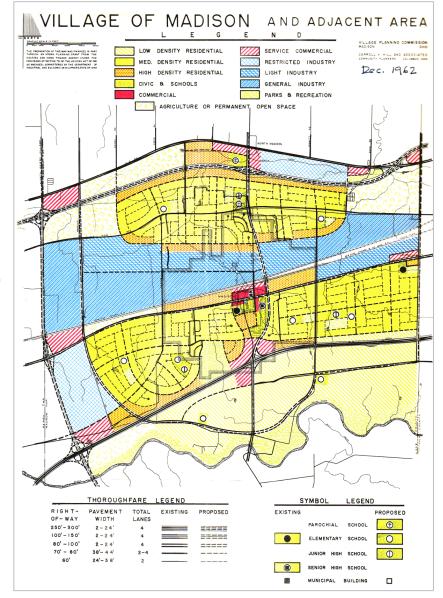
The soils of the village were developed from off-shore deposits of mud, gravels and segregated sands. These soils contribute to the physical characteristics of the village,

and along with the microclimate formed the foundation of the nursery industry in the area. Two unnamed small streams that merge to form Balch Creek, and several ditches drain the area. The stream valleys, which drain north to Arcola Creek, provide the Village its relief from the otherwise gently rolling plain of the former lake bottom.

Bedrock in the area is Chagrin shale. The shale itself has little economic value, but is a source of natural gas in sub commercial quantities, providing energy for many homes in the area. Further below the shale and limestone is the Salina salt formation, extending from western Ohio into upstate New York.

2.3 Previous plans

The previous comprehensive plan drafted for Madison



Village was adopted nearly 45 years ago, in 1962. In the decades following World War II, the population of Northeast Ohio was growing rapidly, along with its manufacturing and commercial base. The ambitious 99 page document reflected the optimism of the time. Rather than becoming a bedroom community, the 1962 plan envisioned Madison Village as a mostly self-contained industrial satellite city.

The plan anticipated that the rapid population growth in Lake County at the time – 20 new residents a day – would continue unabated, eventually causing increased development pressure in the eastern end of the county. The plan foresaw Madison Village accommodating over 55,000 residents by 1985.

Preservation of small-town character and the future of the nursery industry were not addressed by the plan. Much of the area north of the village center, now occupied by some of Northeast Ohio's largest nurseries, was slated for industrial development. The plan called for protection of elements that contributed to the "lore" of the area, stating "the surrounding land should be developed to complement rather than destroy the character inherent in them." The plan called for highway service business development of the area around the OH 528/I-90 interchange; only now is such development taking place.

The anticipated population growth and industrial expansion never occurred, and very little of the plan was implemented.

2.4 Surveys

In recent years, people have been besieged with surveys of every kind; long marketing research-related phone calls, political and opinion polls, requests to fill out customer satisfaction cards at restaurants and businesses, and more. Although the public may be faced with "survey overload," it is still one of the most effective and efficient ways to gather citizen opinions about civic and planning-related issues.

In the planning process, it is important to know the thoughts and opinions of "stakeholders" – residents and business people that may be affected in some way by the plan. The findings of planning-related surveys help shape the plan, and justify its goals and policies as reflecting the will of the stakeholders. It also offers planners and village leaders insight into problems and issues that may not be readily seen. If survey findings are acknowledged and reflected in goals and policies, the result is a plan that residents are more likely to take ownership of, rather than see as an edict from above.

A written survey that received 92 responses from village residents (and 228 responses from Madison Township residents) was conducted as part of the comprehensive planning process. This section describes the surveys and their findings. (The plan appendix includes more detailed survey results.)

Resident survey: question 1 Do you live in the village or township?										
Response	Total #	Total %	Village #	Village %	Twp #	Twp %				
Madison Township	228	71.3%	0	0.0%	228	100.0%				
Madison Village	92	28.8%	92	100.0%	0	0.0%				

Question 2 asked respondents to choose up to three reasons why they decided to live in the village or township. 66% of village residents chose "small town environment" among their responses, compared to 6.5% who chose "suburban environment."

(13) Something else (type

(11) Climate, weather

reason)

Resident survey: question 2 Choose up to three important reasons why you decided to live in the village or township. (check up to three)												
Response		Total			Villag	e	Township					
	#	% surv	% resp	#	% surv	% resp	#	% surv	% resp			
(01) Small town environment (village)	71	22.3%	8.4%	61	66.3%	24.1%	10	4.4%	1.7%			
(08) Like the house that you now own or rent	120	37.6%	14.1%	40	43.5%	15.8%	80	35.1%	13.4%			
(07) Safety, security, lack of crime	81	25.4%	9.5%	30	32.6%	11.9%	51	22.4%	8.5%			
(09) Housing that was affordable	82	25.7%	9.6%	28	30.4%	11.1%	54	23.7%	9.0%			
(05) Close to family, have always lived in the area	99	31.0%	11.6%	25	27.2%	9.9%	74	32.5%	12.4%			
(04) Convenient location, close to work	53	16.6%	6.2%	18	19.6%	7.1%	35	15.4%	5.9%			
(06) Madison School District	52	16.3%	6.1%	16	17.4%	6.3%	36	15.8%	6.0%			
(12) Distance from urban and inner ring suburban problems.	60	18.8%	7.1%	14	15.2%	5.5%	46	20.2%	7.7%			
(02) Rural/semi-rural environment (township)	150	47.0%	17.6%	6	6.5%	2.4%	144	63.2%	24.1%			
(10) Close to Lake Erie	54	16.9%	6.4%	6	6.5%	2.4%	48	21.1%	8.0%			
(03) Suburban environment	15	4.7%	1.8%	6	6.5%	2.4%	9	3.9%	1.5%			

Question 3 asked about residents' long-term plans to stay in the village or township. The responses of village residents implied that they were more mobile than township residents; 63.7% of the village respondents stated that they would live in the village permanently, compared to 65.2% of township residents. 5.5% of village respondents planned on staying for only one or two years, compared to no township respondents.

1.1%

4 1.3% 0.5% **0** 0.0% 0.0%

3.3%

1.2%

2.6%

4 1.8% 0.7%

1.0%

2.8%

Resident survey: question 3 How long do you plan on staying in the village or township? (check one)											
Response	Total #	Total %	Village #	Village %	Twp #	Twp %					
(06) Permanently, unless there's a situation where I'm/we're forced to move.	204	64.8%	58	63.7%	146	65.2%					
(07) Don't know / not sure	54	17.1%	18	19.8%	36	16.1%					
(05) Until I/we retire.	28	8.9%	6	6.6%	22	9.8%					
(01) 1-2 years	5	1.6%	5	5.5%	0	0.0%					
(03) 5-10 years	9	2.9%	2	2.2%	7	3.1%					
(04) Until I/we can afford to buy a larger or nicer house elsewhere.	11	3.5%	1	1.1%	10	4.5%					
(02) 3-5 years	4	1.3%	1	1.1%	3	1.3%					

In Question 4, residents were asked to rate the quality of community services and attributes. Village respondents expressed strong satisfaction with public safety and emergency services. Scoring at the bottom were employment opportunities, diversity and quality of businesses in the village, trails, recreational opportunity for children and teenagers, and public transportation.

Resident survey: question 4
Please rate the adequacy or quality of the following community services and
attributes, from 1 (poor) to 5 (very good). Rate as many as you want.

	, , ,	, ,				,				
Response		Total			Village		Township			
•	Mean	Median	Mode	Mean	Median	Mode	Mean	Median	Mode	
(08) Emergency services (911 and ambulance)	4.08	4	5	4.21	4	5	4.02	4	4	
(07) Fire protection	4.06	4	4	4.21	4	5	4.00	4	4	
(06) Police protection	3.80	4	4	3.99	4	4	3.73	4	4	
(12) Public schools	3.67	4	4	3.73	4	4	3.64	4	4	
(19) Greenspace, farmland and nursery preservation	3.42		3	3.63	4	4	3.34	3	3	
(05) Public water system	3.44	3	3	3.60	4	4	3.36	3	3	
(17) Visual quality of the village center	3.44	4	4	3.54	4	4	3.39	3	3	
(02) Parks and recreation facilities	3.53	4	3	3.53	4	3	3.53	4	4	
(01) Roads	3.31	3	3	3.50	3	3	3.24	3	3	
(04) Public sewer system	2.96	3	3	3.37	3	3	2.76	3	3	
(16) Diversity and quality of businesses in the township	3.08	3	3	3.32	3	3	3.00	3	3	
(14) Code enforcement	2.92	3	3	3.23	3	3	2.81	3	3	
(09) Refuse collection and recycling	2.93	3	3	3.22	3	3	2.80	3	3	
(11) Community arts and cultural facilities	3.15	3	3	3.16	3	3	3.15	3	3	
(13) Recreational opportunities and diversions for children and teenagers	2.63	3	2	2.86	3	2	2.55	3	3	
(18) Visual quality of commercial areas in the township	2.86	3	3	2.83	3	3	2.87	3	3	
(03) Hiking, biking and walking trails	2.85	3	3	2.80	3	3	2.88	3	3	
(10) Public transportation	2.77	3	3	2.74	3	3	2.78	3	3	
(15) Diversity and quality of businesses in the village	2.75	3	3	2.65	3	3	2.79	3	3	
(20) Employment opportunities	2.19	2	3	2.11	2	1	2.22	2	3	

Question 5 asked residents what one thing is most needed to address issues facing the village's built and natural environment. About 29% of village respondents chose "slowing growth and development", compared to 32% of township residents. Almost half of those surveyed answered "more coordination with the township and between local governments", compared to 41% of township residents.

Resident survey: question 5 What one thing do you think is most needed to address issues such as traffic, housing, growth, and open space preservation? (check one) Total % Village # Village % Response Total # Twp # Twp % (02) More coordination with the township and between local 106 43.3% 34 48.6% **72** 41.1% governments (01) Slowing growth and 76 31.0% 20 28.6% 56 32.0% development (03) Stronger land use and zoning 44 18.0% 11 15.7% 33 18.9% regulations (04) More public funds 3.7% 5 7.1% 9 4 2.3% (05) Other 10 4.1% 0 0.0% 5.7% 10

Question 6 asked residents to choose two environmental and open space assets that they feel are in the greatest need of protection. Wooded areas, Lake Erie, and farmland and nurseries were considered to be among the most important assets.

While no part of the village touches the Lake Erie shoreline, a larger percentage of village respondents (54.3%) stated that Lake Erie was among the resources needing the most protection, compared to township respondents (46.9%). Although Arcola Creek lies entirely in the township, a higher percentage of village respondents (33.7%) ranked it as an important environmental asset, compared to township respondents (22.8%).

A lower percentage of village respondents (37%) stated that farmland and nurseries was among the resources needing the most protection, compared to township respondents (43.9%).

Resident survey: question 6 Choose up to three environmental assets you believe need the most protection. (check three)											
Response		Total			Village			Township			
	#	% surv	% resp	#	% surv	1 1117	#	% surv	% resp		
(07) Lake Erie	157	49.2%	18.3%	50	54.3%	19.6%	107	46.9%	17.8%		
(01) Wooded areas	146	45.8%	17.0%	49	53.3%	19.2%	97	42.5%	16.1%		
(02) Farmland and nurseries	134	42.0%	15.6%	34	37.0%	13.3%	100	43.9%	16.6%		
(06) Arcola Creek and adjacent riparian areas	83	26.0%	9.7%	31	33.7%	12.2%	52	22.8%	8.6%		
(09) Groundwater quality	112	35.1%	13.1%	28	30.4%	11.0%	84	36.8%	14.0%		
(04) Quiet, lack of noise	82	25.7%	9.6%	23	25.0%	9.0%	59	25.9%	9.8%		
(03) Scenic views, view corridors	52	16.3%	6.1%	16	17.4%	6.3%	36	15.8%	6.0%		
(05) Air quality	55	17.2%	6.4%	15	16.3%	5.9%	40	17.5%	6.6%		
(08) Dark nighttime sky	29	9.1%	3.4%	6	6.5%	2.4%	23	10.1%	3.8%		
(11) Don't know / not sure	4	1.3%	0.5%	3	3.3%	1.2%	1	0.4%	0.2%		
(10) Other	3	0.9%	0.4%	0	0.0%	0.0%	3	1.3%	0.5%		

Question 7 asked what kind of development was more appealing; houses on large lots with little open space and farmland preserved, or houses on small lots with more open space and farmland preserved. Compared to township respondents, village respondents were far more receptive of development where houses are on small lots, but more greenspace is preserved.

Resident survey: question 7 Would you prefer to see (check one)											
Response	Total #	Total %	Village #	Village %	Twp #	Twp %					
(02) Houses on smaller lots, with more common greenspace preserved	143	51.3%	51	61.4%	92	46.9%					
(01) Houses on large lots, with little common greenspace preserved, or	136	48.7%	32	38.6%	104	53.1%					

Question 8 asked what kind of residential development was more appealing; small-lot development that resembles a traditional village, or larger-lot development that resembles a more conventional suburban subdivision. A large majority of village respondents (72.3%) favor development that feels similar to a traditional village. A smaller percentage of township respondents, although still a majority, also favor traditional village-style development.

The responses to questions 7 and 8 indicate that village residents may be quite receptive to alternative forms of residential development such as new urbanist and traditional neighborhood development, and conservation and cluster development.

Resident survey: question 8 Would you prefer to see (check one)											
Response	Total #	Total %	Village #	Village %	Twp #	Twp %					
(01) Residential development where lots are smaller, but the architecture and built environment feels similar to a traditional village, or	181	65.6%	60	72.3%	121	62.7%					
(02) Residential development, where lots are larger, but the architecture, built environment and overall feel is more like a typical suburb	95	34.4%	23	27.7%	72	37.3%					

Question 9 asked users to judge the importance of various issues that may be addressed in this plan. For respondents from the village, drainage and floodwater retention, water availability and sewer capacity were rated at the top, followed by traffic congestion, commercial architecture and site plan quality, nuisances and code enforcement, and open space conservation and preservation.

"Traffic, vehicle circulation and congestion" was scored as the fourth most important concern. However, traffic count data from the Ohio Department of Transportation and the Northeast Ohio Areawide Coordinating Agency (NOACA) shows that traffic congestion in the area is low.

Resident survey: question 9
The following are issues the comprehensive plan may address. Rate how important you feel these issues are, from 1 (not important) to 5 (most important). Rate as many as you want.

Response	Total			Vi	llage		Township		
	Mean	Median	Mo de	Mean	Nedon	Mo de	Mea n	Median	Mo de
(18) Drainage and floodwater retention	4.43	5	5	4.62	5	5	4.35	5	5
(26) Water availability	4.34	5	5	4.56	5	5	4.26	5	5
(25) Sewer capacity	4.15	4	5	4.39	5	5	4.05	4	5
(10) Traffic, vehicle circulation and congestion	4.15	4	5	4.27	4	4	4.10	4	5
(17) Natural environment in general	4.23	4	5	4.10	4	5	4.28	5	5
(20) Nuisances and code enforcement	3.95	4	4	4.04	4	4	3.91	4	4
(06) Commercial architecture and site planning quality	3.93	4	4	4.04	4	4	3.89	4	4
(13) Open space conservation and preservation	4.09	4	5	4.03	4	5	4.11	4	5
(07) Commercial and retail use diversity and quality	3.86	4	4	3.96	4	4	3.82	4	4
(21) Noise and vibration	3.82	4	4	3.94	4	4	3.77	4	4
(09) Economic development and attracting industry	3.78	4	5	3.94	4	5	3.72	4	5
(19) Arcola Creek	3.87	4	4	3.93	4	5	3.84	4	4
(16) Parks and recreation facilities	3.88	4	4	3.87	4	4	3.89	4	4
(11) Sidewalks, bicycle lanes and paths	3.58	4	5	3.84	4	5	3.47	4	5
(15) Community facilities and amenities	3.71	4	4	3.82	4	4	3.67	4	4
(03) Traditional village/town style residential development	3.68	4	4	3.82	4	4	3.62	4	4
(14) Nursery and agricultural preservation	3.89	4	5	3.77	4	5	3.94	4	5
(02) Residential development and growth in general	3.63	4	4	3.76	4	4	3.57	4	4
(01) Sense of place and unique community identity	3.70	4	4	3.75	4	4	3.68	4	4
(12) Access management (number and location of driveways and turning lanes)	3.66	4	4	3.74	4	4	3.63	4	4
(04) Commercial and retail development in the village core	3.42	3	3	3.60	4	4	3.34	3	3
(08) Business sign size, height, placement and design	3.37	3	4	3.59	4	4	3.27	3	4
(23) Landscaping and trees along roads	3.62	4	4	3.54	4	3	3.65	4	4
(24) Overhead utility lines	3.48	3	3	3.48	3	3	3.48	3	3
(05) Strip commercial development outside of the village core	3.14	3	4	3.39	4	4	3.04	3	4
(22) Landscaping and trees on private property	3.32	3	4	3.29	3	3	3.34	3	4

Question 10 offered statements regarding the built environment and other qualities of the village, and asked respondents to rate how strongly they agreed or disagreed with them.

Regarding small town and semi-rural character, respondents as a whole strongly agreed with the statements "The small town character of the village should be preserved" (+1.35, median +2, mode +2) and "Existing farmland and nurseries should be preserved" (+1.08, median +2, mode +2). There was mild agreement with the statement "Farmland and open space should be visible from the roads" (+0.54, median +1, mode +1).

Respondents mildly agreed with the statement "Residential building lots should be large" (+0.38, median +0, mode -1). Respondents were not totally unreceptive to small lots; there was some agreement with the statement "Smaller building lots are acceptable if a residential development is very well-designed, and offers a large amount of open space" (+0.14, median +1, mode +1).

Regarding **land use**, respondents as a whole strongly agreed with the statement "Semi-industrial uses should be limited to industrial zones (+1.42, median +2, mode +2). Residents agreed with the statement "The village center should have more shops and restaurants" (+0.76, median +1, mode +2) and "The North Madison area should have more shops and restaurants" (+0.92, median +1, mode +2).

Regarding **growth and development**, respondents as a whole agreed with the statements "Urban sprawl in general is a concern" (+0.73, median +1, mode +2), "New development should be close to areas that are already developed" (+0.70, median +1, mode +2), "Vacant and/or underused land close to the center of Madison Village should be developed" (+0.55, median +1, mode +2) and "Residential growth in the village should be limited" (+0.45, median +1, mode +2).

Regarding aesthetics, respondents as a whole strongly agreed with the statements "High-quality architecture and design, short signs, and plentiful landscaping should be required for commercial uses in the village" (+1.16, median +1, mode +2)

Respondents agreed with the statements "Overhead utilities should be placed underground" (+0.71, median +1, mode +2), "Madison Village should be visually distinctive from Madison Township" (+0.64, median +1, mode +2), "Businesses at the I-90 interchange should have short, tasteful signs" (+0.51, median +1, mode +1) and "The quality of residential development leaves a lot to be desired (+0.28, median +0, mode 0).

Respondents were neutral to the statements "Prefab metal buildings should not be allowed in commercial and retail areas" (+0.09, median 0, mode -1) and "Public art, like sculptures and fountains, would enliven Madison" (+0.02, median 0, mode 0).

Regarding **transportation**, respondents as a whole agreed with the statement "Roads should include bicycle lanes if possible" (+0.88, median +1, mode +2). Respondents were neutral to the statements "Roundabouts/circles should be used for traffic calming in some areas." (+0.07, median 0, mode 0).

Regarding **quality of life issues**, respondents as a whole agreed with the statement "Madison needs more diversions for young children and teenagers" (+1.03, median +1, mode +2). Respondents disagreed with the statement "If gasoline prices get too high, I may leave Madison to move closer to work" (-0.46, median -1, mode -2).

Resident survey: question 10

Rate how strongly you agree or disagree with these statements, from -2 (strongly disagree) to 2 (strongly agree).

		Total			Village		Т	ownshi	in
Response	Mean		Mode	Mean	Median				
(11) Semi-industrial uses (machine shops,									
body shops, heavy equipment rental, etc) should be restricted to industrial zones.	1.16	2	2	1.42	2	2	1.05	1	2
(25) The small town character of the	1.33	2	2	1.35	2	2	1.32	2	2
village should be preserved.	55	_	_	55				_	_
(10) High-quality architecture and design, short signs, and plentiful landscaping									
should be required for commercial uses in	0.95	1	2	1.16	1	2	0.86	1	2
the village.									
(06) Existing farmland and nurseries	1.07	1	2	1.08	2	2	1.07	1	2
should be preserved. (20) Madison needs more diversions for									
young children and teenagers.	1.01	1	2	1.03	1	2	1.00	1	2
(26) The semi-rural character of the	1 1 7	2	2	0.04	1	2	1.05	2	2
township should be preserved.	1.17	2	2	0.96	1	2	1.25	2	2
(05) The North Madison area should have	0.80	1	2	0.92	1	2	0.75	1	2
more shops and restaurants.	0.00								
(22) Roads should include bicycle lanes if possible.	0.73	1	1	0.88	1	2	0.67	1	1
(04) The village center should have more	0.60	1	0	0.76	1	2	0.64	1	0
shops and restaurants.	0.68	1	0	0.76	1	2	0.64	1	0
(01) Urban sprawl in general is a concern.	0.76	1	2	0.73	1	2	0.78	1	2
(21) Overhead utility lines should be buried.	0.67	1	2	0.71	1	2	0.66	1	0
(08) New development should be close to areas that are already developed.	0.91	1	2	0.70	1	2	1.00	1	2
(12) Madison Village should be visually	0.22	0	0	0.64	1	2	0.07	0	0
distinctive from Madison Township.	0.23	0	0	0.64	'	2	0.07	0	0
(16) Vacant and/or underused land close	0.22	0.5	2	0.55	1	2	0.24	0	1
to the center of Madison Village should be developed.	0.33	0.5	2	0.55	1	2	0.24	0	1
(07) Farmland and open space should be	0.40		2	0.54	1	1	0.63	1	0
visible from the roads.	0.60	1	2	0.54	1	1	0.63	1	0
(15) Businesses at the I-90 interchange	0.51	1	1	0.51	1	1	0.51	1	1
should have short, tasteful signs. (13) Madison Township should be visually									
distinctive from surrounding townships.	0.41	0	0	0.45	1	0	0.39	0	0
(02) Residential growth in the village	0.36	1	1	0.45	1	2	0.33	1	1
should be limited.									
(19) Residential building lots should be large.(09) The quality of residential	0.46	1	2	0.38	0	-1	0.48	1	1
development leaves a lot to be desired.	0.59	1	0	0.28	0	0	0.72	1	2
(17) Smaller building lots are acceptable if									
a residential development offers a large	0.16	0	1	0.14	1	1	0.16	0	1
amount of open space.									
(24) Prefab metal buildings should not be allowed in commercial areas.	-0.08	0	0	0.09	0	-1	-0.14	0	0
(23) Roundabouts/circles should be used	0.05		•			•		•	
for traffic calming in some areas.	0.05	0	0	0.07	0	0	0.04	0	0
(14) Public art, like sculptures and	-0.03	0	0	0.02	0	0	-0.05	0	0
fountains, would enliven Madison.									
(03) Residential growth in the township should be limited.	0.27	1	2	-0.01	0	1	0.38	1	2
(18) If gasoline prices get too high, I may	-0.62	-1	2	-0.46	-1	2	-0.68	-1	-2
leave Madison to move closer to work.	-0.02	-	-2	-0.40	-1	-2	-0.00	-	-2

Question 11 asked residents to rate the quality of life in the village. About 58% of respondents rated the quality of life as "excellent" or "very good", 31% rated it only "good," while 11% rated it "fair".

Resident survey: question 11 Overall, how would you rate the quality of life in Madison?											
Response	Total #	Total %	Village #	Village %	Twp #	Twp %					
(02) Very good	135	43.4%	44	48.9%	91	41.2%					
(03) Good	128	41.2%	28	31.1%	100	45.2%					
(04) Fair	25	8.0%	10	11.1%	15	6.8%					
(01) Excellent	20	6.4%	8	8.9%	12	5.4%					
(05) Poor	3	1.0%	0	0.0%	3	1.4%					
(06) Don't know / not sure	0	0.0%	0	0.0%	0	0.0%					

2.5 Future challenges

PRESERVATION OF REMAINING SEMI-RURAL CHARACTER

Much of what can be called "semi-rural character" in outlying areas of the village is gone. Frontage development (strip residential) along some sections of the village's long roads blocks vistas of nurseries, fields, woods and open space. Narrow but deep building lots remove some of the region's most valuable agricultural land from production. Conventional suburban development, with speculative housing built along looping subdivision streets, has a much different character than older residential areas near the village center.

PRESERVING A SENSE OF PLACE

Sense of place includes the characteristics of the built environment that make a place special or unique, and foster a sense of authentic human attachment and belonging. Places that lack a sense of place are sometimes referred to as placeless. Placeless landscapes are those that have no special relationship to the places in which they are located – they could be anywhere.

Outside of Madison Village's quaint traditional village center, there is little that physically distinguishes the village from neighboring communities. Residential development in outlying areas more closely resembles that of a suburban community rather than a historic village. Office uses occupying ground-floor retail space may threaten the vibrancy of the village center, and its role as a gathering spot and "third place" for village residents. The village zoning has a Design Review Board, but design standards are minimal, and has basic standards for signs and landscaping. This is extremely important in the historic downtown area.

CHANGING DEMOGRAPHICS

In Lake County and throughout the United States, household types are becoming more diverse. In 1970, about 44% of all households in the US had children, and only 17% of them were single-person households. The 1960s and 1970s saw the suburbanizing of the United States and the spread of suburban-style planning and zoning, and was the period when child raising dominated household concerns. It

was expected that communities catering to households with children, and fashioned appropriate land uses.

In 2006, only about 35% of all households in the US have children, while another 26% are single-person households. By 2040, the US Census Bureau predicts that about 27% of households will have children, and single-person households will remain at about 26%.

Because of changing demographics and shifting housing preferences, the current supply of single-family detached houses on large lots may already exceed the demand projected for the next decade, according to a study by Arthur Nelson in the Autumn 2006 issue of the Journal of the American Planning Association. The demand for attached, small lot, cluster, and other high-density options is likely to outpace the demand for detached houses on large lots. However, in Lake County as a whole, the bulk of new housing continues to be larger detached houses on large lots, catering to a shrinking market of traditional families.

The percentage of Lake County residents older than 65 has been increasing since the 1970s. Older residents may want to remain in the city, town or village where they lived for so many years, but cannot maintain a larger house on a larger lot. With so few options available for them – there are some patio home communities in the village – many senior citizens are forced to find suitable housing elsewhere.

RAILROAD LINES

Madison Village is bisected by the very busy Norfolk Southern and CSX railroad lines. There are no grade-separated crossings in the village. Lake Street, the busiest north-south street in the village and township, crosses the railroad lines at grade near the village center. Throughout the village, many obstacles prevent the construction of a grade-separated railroad crossing, such as inadequate space for a bridge with a gentle slope, and the siting of businesses and historic buildings that would make their demolition necessary.



EMPLOYMENT AND TAX BASE

The 1962 comprehensive plan envisioned Madison Village as an industrial satellite city. Today, the industrial and commercial base of the village is quite small, and many residents commute to Painesville, Mentor or Cleveland for work. Most development consists of single-family houses. Cost of community service studies have shown that the cost of providing services such as public safety and education to residential development, is far greater than their contribution to the tax base.

Communities with an unbalanced tax base are often quick to welcome any commercial or industrial development, regardless of its appropriateness or any negative impacts it may have. Uses that gravitate towards highway exits are often visually intrusive; such development near the Interstate 90 exit could harm the small town character of Madison Village.

2.6 Assets and opportunity

HISTORIC VILLAGE CENTER

Most of Lake County has a suburban or exurban character, with the bulk of development taking place after World War II. Madison's traditional village center, with a streetscape of commercial blocks built in the late 1800s and early 1900s, village green, and gazebo, is one of a few truly walkable business districts in Lake County. The village center serves as a gathering place or "third place" for village and township residents. Traditional pedestrian-oriented town and village environments are increasingly sought after by homebuyers seeking an alternative to conventional suburban and exurban development.



I-90 EXIT

The I-90 exit at River Street (OH 528) makes Madison Village far more accessible than other locations in eastern Lake County. It also provides an ideal location for industries and services that depend on close proximity to the Interstate highway system. Water Tower Drive and RW Parkway was developed to provide sites for businesses that want to take advantage of the nearby I-90 exit.

MUNICIPAL HOME RULE

With its home rule power, Madison Village has far more control over its own destiny than its surrounding townships.

In Ohio, cities and villages have certain powers granted to them in Article 18 of the Ohio Constitution that exist outside their authority found in the Ohio Revised Code. Because these powers originate in the Constitution, laws passed by the General Assembly that interfere with them are invalid as applied to municipal corporations unless those laws otherwise are sanctioned by the Constitution.

NURSERY INDUSTRY

While Madison Village does not have a large industrial base, it is the center for the nursery industry in northeast Ohio. The presence of large nurseries, which provide jobs and a large amount of tax revenue relative to the services they require, also provides a greenbelt around the village center. The nurseries also create opportunities for agritourism.

LAKE ERIE

While Madison Village does not sit on Lake Erie, it is just a short drive away for village residents. Increased lakefront development can benefit Madison Village, with visitor traffic being funneled through the village center. The presence of Lake Erie is responsible for a unique microclimate that makes Madison Village an ideal location for nurseries and vineyards.

3 Demographics

3.1 Introduction

Demographic analysis is an important part of a community comprehensive plan. Identification of demographic and socioeconomic characteristics in Madison Village, surrounding communities, Lake County, and the Cleveland metropolitan area are vital, both for understanding the community and for providing information used in making policy decisions.

This chapter provides a demographic profile of Madison Village, examining information such as population characteristics, educational attainment, school enrollment, income statistics, and employment characteristics. (Information regarding housing can be found in the Housing element.) For comparison, data is also presented for several adjacent communities – Madison Township, Perry Township, Perry Village and Geneva Township – as well as Lake County and the Cleveland-Akron-Lorain metropolitan area.

Demographic analysis provides basic information necessary to develop a well-thought out comprehensive plan. Demographic information is used in a number of ways:

Quantify: Quantifying the various characteristics of township residents is needed to understand the impacts of a population, or subgroup, on matters such as the level of services required, size of markets that can be supported, and impact on transportation and infrastructure.

Trends: Analyzing numbers over time can identify trends now affecting, or which may affect, the community in the future.

Identifying issues and needs: Numbers or trends may identify conditions or issues the village may need to address through policy or programs.

Projections: Demographic analysis is the starting point for developing projections. Understanding the size and characteristics of the future population to be served can help a community plan policy and programs in a timely fashion.

The latest data available for most demographic characteristics is from the 2000 Census of Population and Housing by the U.S. Census Bureau. More recently colleted data have been included to supplement Census Bureau data wherever possible.

Madison Village includes all blocks in Census tracts 2061.

Table 3.1 Census basics 2000 Madison Village							
Population	Housing units	Area (mi²)	Density (per mi²)	Housing units/acre			
2,921	1,171	4.78 mi ²	611/mi ²	.38 du/ac			
(US Census Bureau)							

The following highlight some of

the more important points of the analysis.

- 1. The rate of growth in Madison Village was below that of Lake County until the 1970s, after which the growth rate was much higher than the county as a whole. The number of households will continue to rise as the population of the region disperses into exurban areas.
- 2. Madison Village has a larger percentage of residents between the ages of 25 and 35 than other communities in the area and the county as a whole; unusual for an exurban community.
- 3. Madison Village residents as a whole have higher incomes and higher education attainment than the surrounding township. Compared to the township, a higher percentage of village residents are employed in professional positions, and a lower percentage in manufacturing, construction and trade jobs.
- **4.** Poverty is rare in Madison Village, even among groups such as single parent families.
- 5. Madison Village has very few minority residents.

3.2 Population

The village grew at a rate of 1.7% between 1990 and 2000, from 824 to 838 residents. (Table 3.2) At the same time, the population of Lake County increased by 5.6%. The population of the village in 2000 is slightly below the 1970 population.

Table 3.2 Population change 1910 - 2000 Madison Village										
Year	Madison Village population	∆% from previous decade	Lake County population	∆% from previous decade						
1910	863	n/a	22,927	N/A						
1920	893	3.5%	28,667	25.0%						
1930	927	3.8%	41,674	45.4%						
1940	979	5.6%	50,020	20.0%						
1950	1,127	15.1%	75,979	51.9%						
1960	1,347	19.5%	148,700	95.7%						
1970	1,678	24.6%	197,200	32.6%						
1980	2,291	36.5%	212,801	7.9%						
1990	2,477	8.1%	215,499	1.3%						
2000	·									
(US Census	Bureau)									

The estimated population of the village at the end of 2005 is 3,152, based on the number of housing units (1,302 - 5% vacancy = 1,236) and current estimated median household size (2.55). This estimated population is much higher than published in projections by the state and NOACA.

The overall rate of growth in Madison Village was lower than Lake County as a whole from incorporation to 1970. From the 1970s to the present, the growth rate was higher than the count, reflecting the shift of development from the western end of the county to the eastern end.

From 1950 to 2000, the population of Madison Village rose by 159%, compared to 64% in Geneva Township (including the City of Geneva and Geneva-on-the-Lake), 82% in Perry Village, 353% in Perry Township and 298% in Madison Township. (Table 3.3)

	3.3 lation 1910 on Village; comp		r communities							
Year	Madison Village	Madison Township	Perry Township	Perry Village	Geneva Township *	Lake County	Cleveland PMSA			
1930	927	2,340	1,154	602	5,436	41,674	1,465,787			
1940	979	2,725	1,380	615	6,031	50,020	1,500,798			
1950	1,127	3,891	1,819	655	7,268	75,979	1,759,431			
1960	1,347	8,494	3,291	85	9,466	148,700	2,220,050			
1970	1,678	12,455	4,634	917	11,099	197,200	2,419,274			
1980	2,291	15,378	5,126	961	12,017	212,801	2,277,949			
1990	2,477	17,954	6,780	1,012	11,912	215,499	2,202,069			
2000	2000 2,921 18,428 8,240 1,195 11,954 227,511 2,250,871									
	ata cited in this nsus Bureau)	plan for Genev	va Township in	clude the City	of Geneva and	Geneva-on-the	-Lake Village.			

According to the 2000 Census, 1,137 village residents older than five years (38.9%) lived in a different house in 1995. Of those who have moved to a new residence in the village between 1995 and 2000, 409 moved from elsewhere in the village, 376 from another location in Lake County, 217 from a different county in Ohio, 112 from out-of-state, and 23 from outside the United States.

3.3 Households and families

The average household size has decreased from 1960 to the present; in the United States from 3.33 persons per household to 2.62, and in Lake County from 3.63 to 2.50.

The decrease in family size can be attributed to many trends; families having fewer or no children, increased lifespan, increased divorce rates, and singles marrying at a later age.

Madison Village has a slightly larger percentage of family households (801 families, 79.1% of all households) than Lake County (69.7%) and the Cleveland PMSA (65.9%) as a whole. The percentage of family households is slightly higher than surrounding townships. (Table 3.4) The high percentage of families can be attributed to the exurban nature of the township, with a housing stock consisting primarily of single-family houses on large lots, and a lack of amenities appealing to singles.

Table 3.4 Family and non-family households 2000 Madison Village; comparison to other communities								
Household type	Madison Village	Madison Township	Perry Township	Perry Village	Geneva Township	Lake County	Cleveland PMSA	United States
Family households	72.4%	74.2%	80.5%	76.3%	65.2%	69.7%	65.9%	68.1%
Nonfamily households	27.6%	25.8%	19.5%	23.7%	34.8%	30.3%	34.1%	31.9%
(US Census Bureau)								

The average household size in Madison Village (2.61 persons) is slightly higher than Lake County (2.50) and the Cleveland PMSA (2.47) as a whole. (Table 3.5) The average family size in the village (3.11 persons) is also higher than Lake County (3.03) and the Cleveland PMSA (3.08).

Table 3.5 Household and family size 2000 Madison Village; comparison to other communities								
Median size (persons)	Madison Village	Madison Township	Perry Township	Perry Village	Geneva Township	Lake County	Cleveland PMSA	United States
Household size	2.61	2.65	2.88	2.81	2.45	2.50	2.47	2.59
Family size	3.11	3.08	3.23	3.24	3.00	3.03	3.08	3.23
(US Census Bureau)								

24% of Madison Village households consist of those living alone, compared to 21.3% in Madison Township and 25.6% of Lake County households. (Table 3.6)

Table 3.6 Household type 2000 Madison Village		
Household type	Households	% of households
Total households	1,107	n/a
1-person household:	266	24.0%
Male householder	119	10.7%
Female householder	147	13.3%
2 or more person household:	841	76.0%
Family households:	801	72.4%
Married-couple family:	676	61.1%
With own children <18 years	315	28.5%
No own children <18 years	361	32.6%
Other family:	125	11.3%
Male householder, no wife	38	3.4%
With own children <18 years	22	2.0%
No own children <18 years	16	1.4%
Female householder, no husband	87	7.9%
With own children <18 years	52	4.7%
No own children <18 years	35	3.2%
Nonfamily households:	40	3.6%
Male householder	28	2.5%
Female householder	12	1.1%
(US Census Bureau)		

76% of all village households include two or more people, compared to 69.7% for Lake County as a whole. 28.5% of all township households consist of married couples with children living in the same house, compared to 24% of households countywide. 6.7% of all households in the village are single-parent families, compared to 7.3% of Lake County households.

Attracting residents that will not place a demand on schools, such as singles and senior citizens, may be challenging, because the township lacks amenities appealing to those groups, and the village is located far from large office centers and medical facilities.

8.8% of all households in the village, or 12% of all families, have more than four people, compared to 8.7% of all households and 12.5% of all families countywide. (Table 3.7)

Table 3.7 Household size 2000 Madison Village							
Household type and size	Households	% of households	% of household type				
Family households	801	72.4%	n/a				
2 people	309	27.9%	38.6%				
3 people	202	18.2%	25.2%				
4 people	193	17.4%	24.1%				
5 people	66	6.0%	8.2%				
6 people	17	1.5%	2.1%				
≥7 people	14	1.3%	1.7%				
Nonfamily households	306	27.6%	n/a				
1 person	266	24.0%	86.9%				
2 people	33	3.0%	10.8%				
3 people	7	0.6%	2.3%				
≥4 people	0	0.0%	0.0%				
(US Census Bureau)							

3.4 Age

The median resident age of Madison Village is 36.8 years, compared to Lake County at 38.6 years and the Cleveland PMSA at 37.3 years. (Table 3.8)

Table 3.8 Median ag Madison Vill		son to other	communities						
Madison	Madison	Perry	Perry	Geneva	Lake	Cleveland	United		
Village	Township	Township	Village	Township *	County	PMSA	States		
36.8	36.6	38.1	37.6	37.6	38.6	37.3	35.4		
(US Census B	(US Census Bureau)								

Compared to Lake County and the Cleveland PMSA, Madison Village has a slightly higher percentage of those age 19 and younger, a similar percentage of adults age 20-54, and a slightly lower percentage of older adults and senior citizens (55 and older). (Table 3.9)

The village has a slightly higher percentage of residents aged 25-34 (14.9%) than Lake County (12.9%) and the Cleveland PMSA (13.1%), unusual given its location far from amenities catering to younger adults. There is a lower percentage of residents aged 20-24 (3.7%) than the county (5%) and the Cleveland PMSA (5.4%).

Table 3.9 Age distribution 2000 Madison Village; comparison to other communities									
Aga	Madisor	Village	Lake C	ounty	Cleveland PMSA				
Age	Persons	%	Persons	%	Persons	%			
≤5	177	6.1%	13,906	6.1%	148,150	6.6%			
5-9	221	7.6%	15,486	6.8%	164,872	7.3%			
10-14	234	8.0%	16,079	7.1%	164,207	7.3%			
15-19	200	6.8%	14,689	6.5%	149,349	6.6%			
20-24	109	3.7%	11,460	5.0%	121,813	5.4%			
25-34	435	14.9%	29,247	12.9%	295,398	13.1%			
35-44	492	16.8%	38,345	16.9%	363,179	16.1%			
45-54	419	14.3%	33,689	14.8%	313,916	13.9%			
55-59	149	5.1%	12,718	5.6%	111,566	5.0%			
60-64	113	3.9%	9,848	4.3%	91,791	4.1%			
65-74	212	7.3%	17,024	7.5%	165,665	7.4%			
75-84	133	4.6%	11,676	5.1%	121,616	5.4%			
≥85	27	0.9%	3,344	1.5%	39,349	1.7%			
Groupi	ng of age.	s 19 and	under, 20	-54, and	55 and o	ver			
≤19	832	28.4%	60,160	26.5%	626,578	27.8%			
20-54	1455	49.8%	112,741	49.6%	1,094,306	48.5%			
≥55	634	21.7%	54,610	24.0%	529,987	23.6%			
(US Ce	nsus Bure	au)							

Residents aged 55 and older made up 19.7% of the village population in 1990, rising to 21.7% of the population in 2000. (Table 3.10) The percentage of residents older than 55 is slightly lower than the county as a whole (24.0%).

Table 3.10 Age distribution 1990-2000 Madison Village							
Age	199	90	20	00			
Age	Persons	%	Persons	%			
≤19	783	31.6%	832	28.4%			
20-54	1,206	48.6%	1455	49.8%			
≥55 488 19.7% 634 21.7%							
(US Ce	nsus Bureau)						

3.5 Education

Residents of Madison Village are, as a whole, better educated than those in surrounding exurban communities.

8.4% of Madison Village residents age 25 or over earned an associate degree, compared to 6.7% in Madison Township and Lake County, and 5.7% in the Cleveland PMSA. 15.4% have an undergraduate degree, or advanced degrees, compared to 8.8% of Madison Township residents, 14.6% of Lake County residents and 14.9% of the Cleveland PMSA population. 7.4% completed post-graduate education, compared to 4.5% in Madison Township, 6.9% of the county as a whole, and 8.4% of the PMSA.

Only 11.7% of Madison Village residents over 25 didn't graduate from high school or pass a GED examination, compared to 13.5% of Lake County residents and 17.2% of Cleveland SMSA residents. 33.1% of village residents older than 25 have just a high school education, a lower percentage than other exurban communities in eastern Lake County. (Table 3.11)

Table 3.11 Educational attainment 2000 Age 25 and over, Madison Village; comparison to other communities									
Education	Madison	Madison	Perry	Perry	Geneva	Lake	Cleveland		
Laucation	Village	Township	Township	Village	Township	County	PMSA		
Less than 9th grade	3.7%	3.9%	3.3%	1.2%	7.7%	2.9%	4.3%		
Some high school	8.0%	12.1%	9.3%	7.0%	16.0%	10.6%	12.9%		
High school grad or GED	33.1%	40.0%	38.8%	39.1%	42.1%	34.4%	32.4%		
Some college	23.9%	23.9%	23.5%	21.8%	18.4%	23.8%	21.4%		
Associate degree	8.4%	6.7%	7.0%	8.6%	6.4%	6.7%	5.7%		
Bachelor's degree	15.4%	8.8%	11.5%	15.0%	6.0%	14.6%	14.9%		
Graduate degree or PhD	7.4%	4.5%	6.6%	7.4%	3.4%	6.9%	8.4%		
(US Census Bureau)									

3.6 Occupation and industry

Among employed village residents, 24.7% work in the manufacturing sector, reflecting the large manufacturing base of Lake County; only 20% of workers in Ohio and 14.1% of workers in the United States are employed in the manufacturing sector. The second largest employer is the education, health, and social services sector, with 20.5% of all workers living in the township; a slightly higher percentage than the county (18.0%). About 14.3% of village residents work in the retail trade sector; compared to 12% for Lake County and 11.2% in the Cleveland PMSA.

Only 0.7% of residents work in information-related businesses, fewer than all surrounding communities, the county as a whole (1.8%), and the Cleveland PMSA (2.5%). Despite the exurban location of the village, there is a lower percentage of workers in the agriculture sector (0.3%) compared to all surrounding communities, the county (0.6%) and the Cleveland PMSA (0.5%). (Table 3.12)

Table 3.12 Employment by industry 2000								
Employed civilians age 16 and	<u> </u>	son Village;	comparison	to other co	mmunities			
Industry	Madison Village	Madison Township	Perry Township	Perry Village	Geneva Township	Lake County	Cleveland PMSA	
Agriculture	0.3%	1.6%	1.8%	0.8%	2.0%	0.6%	0.5%	
Construction	5.5%	7.9%	9.1%	7.6%	5.6%	6.1%	5.6%	
Manufacturing	24.7%	27.0%	26.1%	22.3%	20.7%	24.4%	19.1%	
Wholesale trade	2.3%	3.4%	4.8%	4.8%	2.6%	4.0%	3.7%	
Retail trade	14.3%	11.5%	12.7%	10.8%	12.3%	12.0%	11.2%	
Transportation, warehousing, utilities	4.5%	7.2%	4.2%	5.7%	4.2%	3.9%	4.7%	
Information	0.7%	1.1%	1.4%	2.4%	1.3%	1.8%	2.5%	
Finance, insurance, real estate	6.5%	4.6%	4.5%	4.7%	2.4%	7.1%	7.5%	
Professional, scientific, management, administrative	7.7%	5.8%	6.8%	5.8%	4.5%	8.0%	9.1%	
Educational, health, social services	20.5%	17.8%	15.0%	18.1%	20.1%	18.0%	20.4%	
Arts, entertainment, recreation, hospitality	6.0%	5.9%	4.9%	7.9%	8.3%	6.7%	7.3%	
Other services	3.9%	3.3%	5.1%	3.9%	3.5%	4.3%	4.4%	
Public administration	3.0%	2.7%	3.6%	5.2%	2.5%	3.1%	3.8%	
(US Census Bureau)								

Distribution of employment by occupation in the township – what people actually do for a living – is similar to the overall distribution for Lake County.

74.6% of all workers in Madison Village can be considered white-collar (management/professional, service, sales/office), compared to 67.5% for Madison Township, 73.3% for Lake County, and 85% for the Cleveland PMSA. There are a much lower percentage of service workers (11.7%) and those working in construction and manual trades (7.5%) among the population than surrounding communities. (Table 3.13)

Table 3.13 Employment by occupation 2000 Employed civilians age 16 and over, Madison Village; comparison to other communities								
Occupation	Madison Village	Madison Township	Perry Township	Perry Village	Geneva Township	Lake County	Cleveland PMSA	
White collar								
Management, professional, related	34.0%	24.6%	31.0%	31.0%	22.6%	32.1%	33.0%	
Service	11.7%	13.0%	16.6%	16.6%	16.6%	13.0%	14.4%	
Sales and office	29.6%	26.9%	24.4%	24.4%	20.3%	28.2%	27.7%	
Blue collar								
Farming, fishing and forestry	0.3%	0.4%	0.3%	0.3%	2.6%	0.3%	0.2%	
Construction, extraction, maintenance	7.5%	11.7%	12.1%	12.1%	8.4%	8.7%	8.1%	
Production, transportation, material moving	16.9%	23.4%	15.5%	15.5%	29.5%	17.7%	16.6%	
(US Census Bureau)								

3.7 Income

Madison Village can be considered a middle class community. The median household income in the village (\$50,786) is higher than the surrounding township (\$45,651), county (\$48,763), PMSA (\$42,809) and country (\$41,994). Median family income (\$56,761) is higher than the township (\$51,513), PMSA (\$52,057) and nation (\$50,066), but slightly lower than the county as a whole (\$57,134). (Table 3.14)

Table 3.14 Median household and family income 1999 Madison Village; comparison to other communities								
Attribute	Madison Village	Madison Township	Perry Township	Perry Village	Geneva Township	Lake County	Cleveland PMSA	
Median household income	\$50,786	\$45,651	\$54,904	\$52,955	\$33,517	\$48,763	\$42,089	
Median family income \$56,761 \$51,513 \$60,313 \$56,281 \$40,358 \$57,134 \$52,047								
(US Census Bureau)								

Madison Village has a lower percentage of households with an annual income under \$15,000 (7.1%) than the county as a whole (9.6%), a slightly higher percentage of households with an income between \$50,000 and \$99,999 (45.3% vs 37.2%), and a much lower percentage of households with an income over \$100,000 (5.7% vs 11.4%). (Table 3.15)

Table 3.15 Household income distribution 1999 Madison Village; comparison to county and PMSA								
	Madisor	Village	% of	% of				
Income	House- holds	%	Lake County	Cleveland PMSA				
Less than \$10,000	45	4.1%	4.9%	9.3%				
\$10,000 to \$14,999	33	3.0%	4.7%	6.2%				
\$15,000 to \$24,999	127	11.5%	11.0%	12.8%				
\$25,000 to \$34,999	140	12.6%	12.4%	12.8%				
\$35,000 to \$49,999	198	17.9%	18.4%	16.7%				
\$50,000 to \$74,999	329	29.7%	24.2%	20.1%				
\$75,000 to \$99,999	173	15.6%	13.0%	10.7%				
\$100,000 to \$149,999	48	4.3%	8.4%	7.3%				
\$150,000 to \$199,999	8	0.7%	1.5%	1.9%				
\$200,000 or more	7	0.6%	1.5%	2.1%				
(US Census Bureau)								

In 1999, 18 families, or 2.2% of all families in the village, live below the poverty level, compared to 3.5% in Lake County and 8.2% in the Cleveland PMSA. 99 residents, or 3.4% of the township population, live under the poverty level, compared to 5.1% of all Lake County residents and 10.8% of all Cleveland PMSA residents.

There were only nine senior citizens living under the poverty level -9.1% of those in poverty - while 14.5% of those living under the poverty level in Lake County are seniors. Female-headed single parent households usually make up the bulk of family types living under the poverty level, but in the village only three such households live under the poverty level. (Table 3.16)

Table 3.16 Poverty status: persons 1999 Madison Village; comparison to county and PMSA								
	Madisor	Village	% of	% of				
Group	Number	%	Lake County	Cleve PMSA				
All persons under poverty level	99	3.4%	5.1%	10.8%				
Persons in poverty: ≤17 years *	30	30.3%	32.4%	37.5%				
Persons in poverty: 18-64 years *	60	60.6%	53.1%	51.8%				
Persons in poverty: ≥65 years *	9	9.1%	14.5%	10.7%				
All families under poverty level	18	2.2%	3.5%	8.2%				
Families in poverty: married w/children ≤18 *	6	33.3%	25.1%	17.4%				
Families in poverty: married w/o children *	9	50.0%	14.6%	11.4%				
Families in poverty: male HH w/children ≤18 *	0	0.0%	5.3%	6.0%				
Families in poverty: male HH w/o children *	0	0.0%	1.0%	1.9%				
Families in poverty: female HH w/children ≤18 *	3	16.7%	49.4%	56.9%				
Families in poverty: female HH w/o children *	0	0.0%	4.6%	6.5%				
* = Percentage of all persons or families under the poverty level; not percentage of all persons or families HH = householder, no partner of opposite sex present (US Census Bureau)								

To determine qualification for loans and grants, HUD considers the number of households who are very low, low or moderate income. 31.7% of households in Madison Village meet the HUD definition of moderate, low or very low income households. (Table 3.17)

Table 3.17 Moderate, low and very low income households 2000 Madison Village								
Household attribute	Households	% of households						
Total households	1,105	n/a						
Moderate income (51-80%)	215	19.4%						
Low income (36-50%)	86	7.8%						
Very low income (≤35%)	49	4.4%						
Total households ≤80%	755	68.3%						
(US Census Bureau)								

Moderate-income household means a household having an income equal to or less than the Section 8 low-income limit, which is defined as **80% or less** of the median family income adjusted for family size (single person households are compared against the median income for other single person households, households with five people are compared against the median income for other five person households, and so on), as established by HUD for the Cleveland PMSA.

Low-income household means a household having an income of **50% or less** of the median family income for the Cleveland PMSA, adjusted for family size.

Very low-income household means a household having an income of **35%** of the median family income for the Cleveland PMSA, adjusted for family size.

3.8 Race and ethnicity

The village population is predominantly white, typical of exurban communities in northeast Ohio. The 2000 Census counted just 13 black residents, six Asians, four Native Americans, and 21 mixed race residents living among 2,873 white residents in Madison Village. African-Americans comprise about 18.5% of the Cleveland PMSA population, and about 2% of Lake County residents. (Table 3.19)

Table 3.19 Race and ethnicity 2000 Madison Village; comparison to other communities							
Race	Madison	Madison	Perry	Perry	Geneva	Lake	Cleveland
nace	Village	Township	Township	Village	Township	County	PMSA
White	98.4%	98.1%	98.5%	98.4%	95.5%	95.4%	76.9%
Black / African-American	0.4%	0.4%	0.3%	0.1%	0.9%	2.0%	18.5%
Native American / Alaskan	0.1%	0.2%	0.1%	0.2%	0.2%	0.1%	0.2%
Asian	0.2%	0.3%	0.2%	0.7%	0.3%	0.9%	1.4%
Hawaiian / Pacific Islander	0.0%	0.0%	0.0%	0.0%	>0.1%	>0.1%	>0.1%
Other	0.1%	0.3%	0.2%	0.3%	1.5%	0.7%	1.4%
Two or more races	0.7%	0.7%	0.7%	0.4%	1.6%	0.9%	1.6%
(US Census Bureau)							

There were only about 1,500 Hispanic residents in Lake County in 1990; in 2000, their number grew to 3,879. Hispanics now make up about 1.7% of the county population. While still a small percentage compared to the greater Cleveland area, they play a vital role in the economy of eastern Lake County, with many working in its nurseries and starting small businesses. The City of Painesville is home to most Hispanic residents in Lake County, where they make up 12.9% of that city's population.

Madison Village is in the heart of Lake County's "nursery country." Despite that, only 24 residents claimed Hispanic origin in Census 2000. (Table 3.20) The presence of Mexican immigrants and migrant workers in the area is an indicator of a stable or growing economy.

Table 3.20 Hispanic/Latino population 2000 Madison Village; comparison to other communities							
Ethnicity	Madison Village	Madison Township	Perry Township	Perry Village	Geneva Township	Lake County	Cleveland PMSA
Hispanic or Latino	0.8%	1.1%	0.8%	0.4%	4.6%	1.7%	3.3%
Not Hispanic or Latino	99.2%	98.9%	99.2%	99.6%	95.4%	98.3%	96.7%
(US Census Bureau)							

As more minorities aspire to the "American dream," and enter the middle and upper middle class, some will chose to settle down in Madison Village, for the same reasons current residents have chosen the village as their home. Expanded retail development in Madison Township may also attract some minority residents to the village. There is no recent history of ethnic or racial divisiveness in the village, and it is expected that current residents will accept new minority residents as their own.

3.9 Future population

Predicting future population growth – or decline – is an inexact science, made even more difficult by the small sample size in Madison Village.

Population projections from the 1960s and 1970s were usually wildly optimistic, and did not anticipate trends such as decreasing family sizes, the shrinking importance of manufacturing, the recession of the 1980s, and the "brain drain" affecting Northeast Ohio today.

Table 3.21 offers population projections to 2030 for the village from NOACA and the Ohio Department of Development, and the Lake County Planning Commission

Table 3.21 Projected population 2 Madison Village	2010-20)30							
Year	1950	1960	1970	1980	1990	2000	2010	2020	2030
Population (NOACA, ODOD)	1.127	1.347	1,678	2,291	2.477	2.921	3,241	3,252	3,214
Population (LCPC)	1,12/	1,347	1,076	2,291	2,4//	2,921	3,456	3,879	4,254
(US Census Bureau, NOACA, G	Ohio Dep	artment o	of Develo	pment)					

NOACA/Ohio Department of Development population projections consider fertility and mortality rates, life expectancy, and in-migration and out-migration. They do not consider development trends such as commercial development in the US 20/North Ridge Road corridor, or the growing popularity of exurban communities in general.

Lake County Planning Commission projections consider a continued annual average of 24 new housing units, a 5% housing vacancy rate, and a median household size decreasing from 2.55 in 2000 to 2.25 in 2030. Projections do not consider buildout, or gains through annexation.

The most significant trend that would affect the population of Madison Village is continued development in exurban areas; not from those leaving Cleveland or pre-WWII era suburbs, but rather families and empty-nesters moving from inner and middle-ring suburbs. A recession or declining regional economy, war, and/or high energy costs may stifle future population growth.

4 Land use

4.1 Introduction

The Land Use element is not intended to be a lot-by-lot plan for future development and preservation of land in Madison Village, but rather a guide for development and best management practices. To preserve its semi-rural character and Western Reserve style, and promote quality development over lowest-common-denominator uses and buildings, the village must address the increasing suburban growth pressures and redevelopment of existing areas.

The Land Use element will evaluate existing conditions, identify emerging patterns, analyze the current zoning scheme, and provide achievable goals and policies to meet the desires of residents and public officials, as identified in the resident survey and various public meetings.

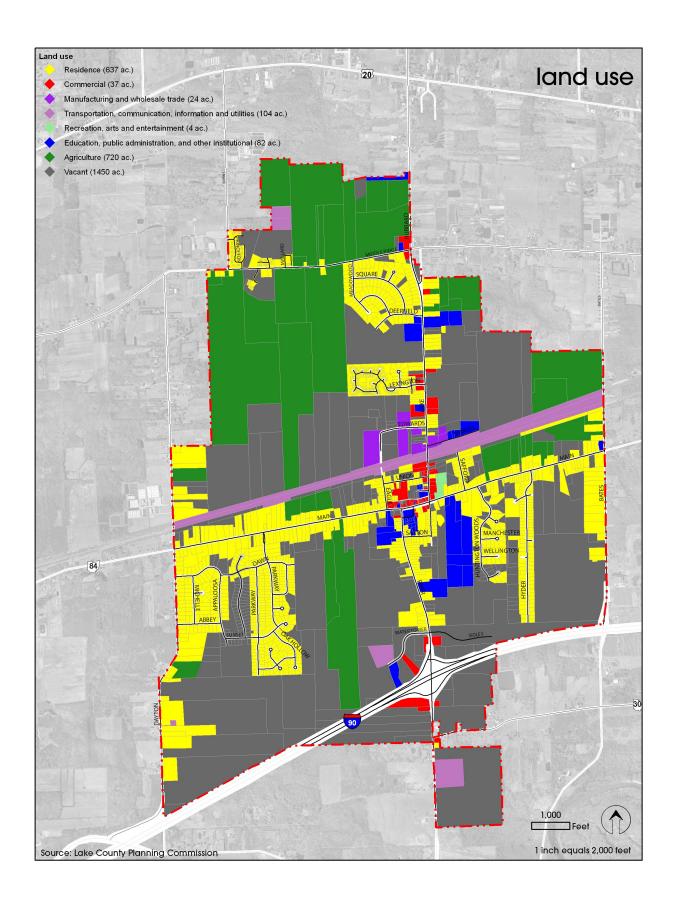
Table 4.1 Land use distribution Madison Village		
Use	Acres	% of total
Residence	637	20.8%
Commercial	37	1.2%
Manufacturing/wholesale trade	24	0.8%
Utilities / transportation / communication / information	104	3.4%
Recreation/arts / entertainment	4	0.1%
Public administration / education / other institutional	82	2.7%
Agriculture	720	23.5%
Vacant	1,450	47.4%
Total	3,058	100.0%

4.2 Development history and trends

A comprehensive plan is a land use document that provides the framework and policy direction for land use decisions and other actions affecting the physical, economic, and social aspects of the community. It indicates in a general way how local government leaders want the community to develop in the future.

RESIDENTIAL DEVELOPMENT

Approximately 637 acres (21%) of the land is in residential uses. Madison Village has a variety of residential development styles, often dictated by the timing of the development. Older, more traditional style homes and street layouts exist in the interior of the village and along the outer edges following the Main Street corridor. Traditional single family homes and developments have been constructed in the past 10-20 years further form the village center. Multifamily developments have also begun to appear on the landscape along Middle Ridge Road.



COMMERCIAL DEVELOPMENT

Commercial uses occupy only 37 acres, or 1.4% of all land in Madison Village. Commercial uses are concentrated in the village center along Main Street, and scattered along portions of Lake Street. Water Tower Drive and RW Parkway were built with the intention of attracting office and highway-oriented businesses to the Interstate 90/River Road exit area. Development of the exit area has been slow, with commercial uses limited to a McDonalds restaurant, a full service restaurant, and a small hotel (under construction at the time this plan was written). The bulk of new commercial development in eastern Lake County is along the US 20/North Ridge Road corridor, drawn to the area by a new Wal-Mart Supercenter store and its proximity to residential areas in North Madison.

INDUSTRIAL DEVELOPMENT

Industrial uses occupy 24 acres, or 0.8% of all land in Madison Village. Industrial zoned land in the village is divided between a cluster north of the village center, along Lake Street north of the CSX/Norfolk Southern corridor (zoned M-1), and the area along River Street and Warner Road immediately south of Interstate 90 (zoned B-5). Approximately 240 acres are zoned M-1.

The CSX/Norfolk Southern corridor separates the village's M-1 industrial cluster from Interstate 90. The desirability of industrial sites in this area may be hindered because traffic must cross the busy rail corridor at grade to access the Interstate highway system. This plan recommends downzoning of large, unoccupied tracts of industrial zoned land north of the rail corridor, and concentrating industrial development efforts, such as tax increment financing (TIF) districts or future industrial parks, to the area immediately south of the Interstate 90/River Road exit.

AGRICULTURAL USES

About 720 acres, or 23.5% of the village, is occupied by agricultural uses, mostly nurseries. The bulk of nurseries in the village are north of Main Street. Much potential agricultural acreage in the village lies fallow, and many former nursery sites have reverted to forest. (About 47% of all land in Madison Village is vacant.) Frontage development, conversion to residential uses, and conflicts with nearby residents threaten the continued existence of the nursery industry in the village and eastern Lake County.

Most vineyards in the Madison area are south and southeast of the village. Wineries are becoming increasingly popular as a tourist destination and economic development driver in the area.

SPRAWL IN MADISON VILLAGE

Through their work with the Brookings Institute, Anthony Downs and Henry Richmond have defined the following traits of sprawl encountered in nearly all metropolitan areas in the country, including northeast Ohio. According to Robert Burchell of Rutgers University, ten traits of sprawl development include:

- 1. Unlimited extension of new development
- 2. Low-density residential and commercial settlements, especially in new-growth areas
- 3. Leapfrog development
- 4. Fragmentation of powers over land use among many small localities
- 5. Dominance by private vehicles
- 6. No centralized ownership of land or planning development
- 7. Great variances in the fiscal capacities of local governments because the revenueraising capabilities are strongly tied to the property values and economic activities within their own borders
- 8. Widespread commercial development along major roadways
- 9. Major reliance upon the filtering or trickle-down process to provide housing for low-income families
- 10. Spatial segregation of different types of land uses through zoning regulations

A number traits defined by Downs and Richmond apply to Madison Village, and many other communities in Lake, Geauga and Ashtabula counties.

Under current zoning and development design guidelines the current pattern of development and consumption of open space as described by Downs and Richmond, along with the

other traits of sprawl, will likely continue into the future.

4.3 Current zoning regulations

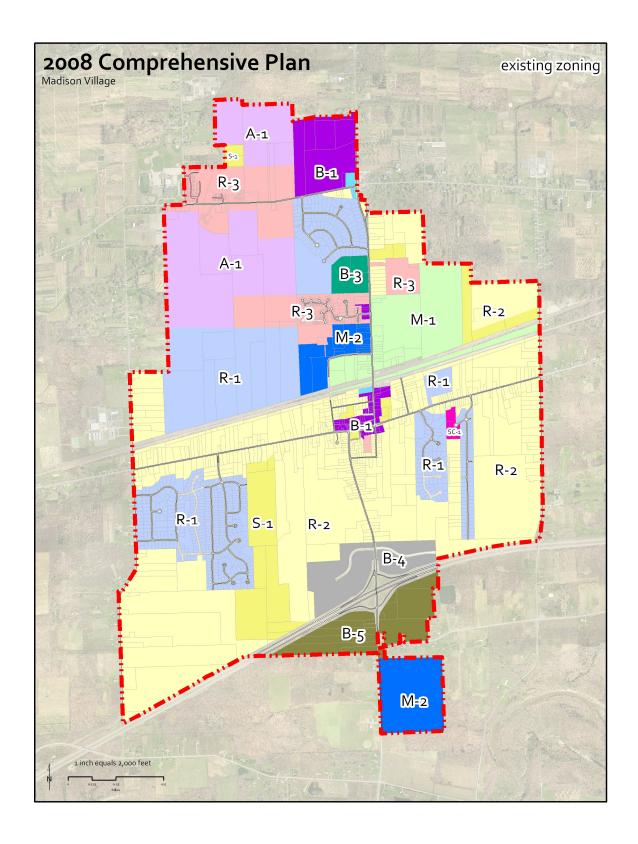
Zoning is the primary form of land planning control for local communities in North America. Zoning codes are comprehensive guides for day-to-day development decisions in a community. They expand on the information in the comprehensive plan by providing parcel-specific regulations for the location of different land uses, regulation of those uses, and detailed



Urban sprawl in Madison Village

specifications for the site planning and design of proposed development.

Madison Village adopted its first zoning regulations in 1963. The current zoning code was adopted in 1996 with revisions in 2005.



RESIDENTIAL ZONES

In the Madison Village zoning code, there are four residential zoning districts; two single family residential districts (R-1 and R-2), one multiple family residential district (R-3) and the Senior Citizen Residential (SC-1) district.

Table 4.2 Residential zoning district bulk requirements Madison Village									
Attribute	R-1	R-2	R-3 single family	R-3 two family					
Building height (maximum)	2.5 stories/35'	2.5 stories/35'	2.5 stories/35'	2.5 stories/35'					
Front yard (minimum)	40′	40′	40′	40′					
Side yard (minimum)	15'	15'	15'	15'					
Rear yard (minimum)	40′	45′	40′	40'					
Lot area per household (minimum)	20,000 ft ²	20,000 ft ²	20,000 ft ²	12,350 ft ²					
Density (maximum)	2.17 du/acre	2.17 du/acre	2.17 du/acre	3.52 du/ac					
Lot frontage (minimum)	100′	100′	100'	100′					
Residential floor area (minimum, 1 fl)	1,700 ft ²	1,700 ft ²	1,900 ft ²	1,900 ft ²					
Residential floor area (minimum, 2+ fl)	1,900 ft ²	1,900 ft ²	1,900 ft ²	1,900 ft ²					
Distance between buildings	n/a	n/a	30'	30′					

All larger single family residential subdivisions in the village are zoned R-1; there is also a large R-1 zoned parcel northwest of the village center, immediately north of the CSX/Norfolk Southern rail corridor. The bulk of land zoned R-2 is located south rail corridor. All R-3 zoned parcels are located north of the rail corridor.

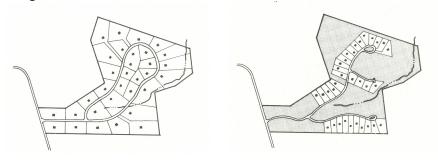
The primary difference between the R-1 and R-2 zoning districts are the permitted rear yard setbacks (40'/ minimum in R-1, 45'/ minimum in R-2), and conditional uses (R-1: home occupations and child day care, R-2: same as R-1 plus semi-public uses, agriculture, nursing homes, two-family dwellings, specialized animal raising, and bed and breakfast inns.) Regarding home occupations, the Village should review potential impacts such as deliveries, non-family employees, parking, vehicle/equipment storage, potential number of customers, signage. Home occupations are a growing trend and should be accommodated, but the Village should realize the unintended consequences of the zoning guidelines.

Unlike most other zoning codes used by communities in the United States, the Madison Village zoning ordinance does not include provisions for planned unit development. Planned unit development (PUD) zoning provisions permit large parcels to be developed in a more flexible manner than allowed by the underlying zoning. PUD ordinances may allow developers to mix land uses, such as residential and commercial, on a large parcel and to develop the parcel at greater densities, and with more design flexibility, than otherwise allowed by the underlying zoning district.

Similar to PUD's, this plan recommends the addition of Residential Conservation Development Zone, to permit more flexibility with new residential development, and allow more than just conventional suburban low-density subdivisions to be built in the village. This style will permit density neutral developments (or potentially a density bonus) with a dedicated open space component that can be used to protect riparian corridors, wetlands, old growth tree stands, steep slope areas and other natural features. Typically, the lots are smaller and impact to the overall site is less.

In some cases, this means less pavement and other infrastructure costs to the developer.

In the example below, both designs occur on the same 32 acre tract with 32 lots. The design on the left is the standard conventional subdivision design commonly found in northeast Ohio, including Madison Village. On the right, the same site contains 32 lots, but 50% is set aside as common open space through residential conservation design standards. Of note, the stream corridor is not impacted in this design.



COMMERCIAL ZONES

The village zoning code includes five commercial zoning districts; B-1 (general business), B-2 (highway business), B-3 (planned commercial), B-4 (freeway business) and B-5 (freeway business/industrial). B-1 zoned land is located in the village center and at the northwest corner of North Ridge Road and Hubbard Road. Small B-2 zoned parcels are located at northwest corner of North Ridge Road and Hubbard Road, and on either side of Lake Street south of the CSX/Norfolk Southern corridor. B-4 land is located in the vicinity of Water Tower Drive and RRW Parkway, immediately north of the I-90 exit. B-5 zoned land is located immediately south of the I-90 exit. No parcels are zoned B-3.

Table 4.3 Commercial zoning district bulk requirements Madison Village								
Attribute	B-1	B-2	B-3	B-4	B-5			
Building height (maximum)	2 stories/60'	2 stories/45'	2.5 stories	35'	35'			
Front yard (minimum)	50'	45'	100′	50′	80'			
Side yard (minimum)	20'	20'	50′	20'	20′			
Rear yard (minimum)	40′	40'	50′	40'	40′			
Lot coverage (maximum)	N/A	40%	N/A	40%	40%			

The Madison Village zoning ordinance has a simple, logical categorization of permitted uses, with consistent terms used across all zoning districts. (Table 4.3).

Currently, the village may have surplus of commercial zoned land; more than even future demand may warrant. The classic economic model of supply and demand applies to real estate as well as other commodities; if the demand for land in a certain area is high and the supply is limited, the price of that land will be higher than in an area where the demand is low and the supply is larger. Considering the small market size, the large supply or inappropriate location of commercial zoned property, along with many factors hindering the demand for development – a small market size, and limited utilities in some areas – hinder the demand and competition for space, and

thus keep real estate prices low. Low real estate prices make low-end businesses more viable.

Expressway exits in semi-rural areas are often considered attractive for truck stops; truck traffic is relatively heavy along the highway, land is inexpensive, and a ready workforce is nearby. Negative externalities generated by truck stops, such as light and noise pollution, drainage and runoff from the large impervious surface, increased truck traffic and congestion at the I-90 exit, large visually intrusive high-rise signs, and their tendency to become an "anchor" that would form the base of a commercial corridor dominated by mechanical commercial and semi-industrial uses, could cause great damage to the small town character of Madison Village.

Table 4.4 Commercial zoning district perm	nitted uses				
Madison Village Use	B-1	B-2	B-3	B-4	B-5
Animal hospitals or clinics		С			
Assembly					C
Automobile repairs		Р			
Automotive sales		C			
Bed and breakfast inns	С				
Business services	Р		Р		
Clinics	С		Р		
Commercial schools			Р		
Entertainment facilities	С	C	F		
Essential services	Р	Р	Р	Р	Р
Financial services	Р		Р		
Funeral homes	Р				
Garden centers		Р			
Gasoline service stations	С	Р		Р	Р
Light manufacturing					C
Motels	С	Р		Р	Р
Offices	Р	C	Р	C	C
Personal services	Р		Р		
Pharmaceutical, electrical equipment, plastics and similar uses					С
Professional activities	Р		Р		
Public service facilities	Р	Р	Р	Р	C
Public uses	Р	Р	Р	Р	Р
Recreational facilities	С		C		
Research and development facilities					C
Restaurants	Р	Р	Р	Р	Р
Retail businesses	Р	C	Р	C	C
Sale or storage of building material	C	C	C		C
Semi-public uses	Р	C	C		
Social activities	С	С	C		
Taverns	С	С			
Warehousing					C
Wholesale businesses	С	C			C
P: use permitted by right. C: condition	nal use requiri	ng Planning	Commissio	n approval	

Current zoning regulations impose vehicle-oriented site planning requirements, which are inappropriate in a historic village setting, to B-1 parcels fronting Main Street in the village center. This issue is addressed in the Village Center section of this element.

4.4 Village center

The village center on Main Street between Eagle Street and Lake Street is perhaps the most distinguishing characteristic of Madison Village. The village center is one of the few historic, pedestrian-oriented business districts in Lake County. The village center acts as a "social condenser" and "third place", where people congregate to find a sense of community



Uses that generate pedestrian traffic and act as a social condenser: restaurant, hobby shop, tavern

outside of the home and workplace. The village center meets the instinctive need of humans to have a place to meet friends or take solace in the familiarity of both

people and their surroundings. The village center also serves as an incubator for budding small businesses.

LOW-TRAFFIC OFFICE AND SERVICE USES IN RETAIL STOREFRONTS

The north side of Main Street in the village center is lined with commercial buildings that front onto the sidewalk. The south side of the street is fronted by Madison Public Square; houses built in the 19th century, some of which are used for businesses such as coffee shops and offices; and a funeral home parking lot.

In the village center, many storefronts are occupied by offices and other non-retail and non-restaurant uses. Of the 28 retail storefronts in the village center, 11 are occupied by offices, institutional uses, and services that have low foot traffic counts. The presence of these uses lowers the amount of activity at the street level, and undermines the role of the village center as a "third place."

This plan encourages restricting institutional, office and service uses that generate little or no pedestrian traffic to upper floors and secondary frontages (ground floor space that does not front directly on the street).





Uses that generate little pedestrian traffic and act as a social condenser: HVAC contractor, mortgage broker

Uses permitted to occupy primary frontage (ground floor space that fronts directly on a street) of a building, should be limited to those that generate a high level of customer traffic throughout the day, and create a dynamic of community interaction. Examples of uses promoting street animation include restaurants (two new restaurants were announced during the final stages of the planning process), coffee houses, banks, barber and beauty shops, gift stores, art studios, book stores, florists, antique stores, hardware stores, clothing stores, jewelry stores, and video rental outlets.

Table 4.5 Village center storefronts		
Use	Number	Traffic generator
Accountant	1	No
Antique/"kountry" gift shop	2	Yes
Barber shop	1	Yes
Bead shop	1	Yes
Coffee shop	2	Yes
Construction/building trades	3	No
Dentist	2	No
Florist	1	Yes
Hobby shop	1	Yes
Insurance agent	1	No
Laundromat	1	Yes
Martial arts studio	1	No
Mortgage broker	1	No
New age bookstore/gift shop	1	Yes
Photography studio	1	No
Real estate agent	1	No
Restaurant/diner	3	Yes
Tavern/bar	1	Yes
Vacant	3	No

DESIGN AND SITE PLANNING

Current zoning regulations would prohibit the recreation of the Madison Village center; every building on the north side of Main Street between Eagle Street and Lake Street is nonconforming. In the B-1 zoning district, the minimum front yard setback is 50 feet, the minimum side yard setback is 20 feet, and the maximum lot coverage is 20%. The B-1 zoning district is not exempt from off-street parking requirements.

Design and site planning requirements that will preserve the pedestrian-oriented character of the village center should address the following:

Building siting

- Require buildings to front directly on the sidewalk, with no parking, landscape buffers, patios or other impediments between the sidewalk and the façade.
- Require all parking to be placed behind the building.
- Reduce the number of parking spaces required for a use, and designate a *maximum* amount of required off-parking.

Exterior walls

Materials: brick or stone on all visible elevations.

- Pattern: require repeating, offset, reveal, pilaster, projecting ribs, fenestration patterns, piers, color change, texture change, material module change.
- Top: require cornice treatments, overhangs, brackets, stepped parapets.
- Four sided design: walls must include materials and design characteristics consistent with those on the front.
- Street facing walls: require a high level of transparency on street-facing walls, with windows and building entrances at eye level.
- Facades and street facing walls: require a high level of transparency, divided and proportioned using features such as windows, display areas, entrances, arcades, arbors, and awnings along a large percentage of the façade.
- Building entrances: require clear definition.
- Garage doors: do not permit on the façade or a street-facing wall.
- Windows: require horizontal orientation on non-display windows.

Roof

- Require flat roofs with a parapet wall.
- Rooftop mechanical equipment: require screening

Building colors

- Require traditional, natural brick and masonry colors; limit use of primary or corporate colors.
- Limit color changes to change of plane or reveal line.

4.5 Strip commercial development

Over the last 50 years, auto-dependent commercial development has developed along highways to the point where it dominates the form and character of area communities. Commercial and semi-industrial strip development, such as the area along the North Ridge Road/US 20 corridor, is one result of such development.

Previous village plans were either silent on the issue of strip development, or included goals related to concentrating development in nodes or clusters. Fortunately, current zoning in Madison Village does not include strips of B-zoned parcels. Commercial districts are groped in clusters; the I-90 exit, village center, and northwest corner of Lake Street and Middle Ridge Road. To prevent the establishment of strip commercial districts, any incremental expansion of these commercial nodes is not recommended.

4.6 Retail diversity and quality

Residents of Madison Village must travel to Madison Township or Perry Township for consumable goods such as groceries and drug. In eastern Lake County, shopping options for clothing, furniture, appliances, and other durable and dry goods are extremely limited. The selection of restaurants in the area is also very limited; either small diners with limited hours, taverns with a kitchen, or fast food. There are no movie theaters, miniature golf courses, arcades, bowling alleys, or other outlets for entertainment. Aside from small grocery and convenience stores, most commercial uses in the village do not meet the day-to-day needs of village residents.

Retailers often have very firm ideas about what is considered an ideal location, and these ideas do not necessarily mesh with what a community has to offer. While a

community has sites where it would like to see a store or restaurant locate, the retailer has its own ideas about where it would like to go. More often than not, these sites are not the same

Retail and restaurant site selection specialists often use a formula to determine whether a market is a viable location for a store or restaurant. While the proximity to I-90 is certainly a positive characteristic for business attraction, criteria determining an ideal location is mostly quantitative, and usually includes the following:

- Population living in a certain radius (mileage and driving time).
- Percentage of families versus singles in a certain radius.
- Average family and household income in a certain radius.
- Average age of the population in a certain radius.
- Cumulative income of all people in a certain radius.
- Education level in a certain radius.
- Number of jobs in a certain radius.
- Traffic volume at a location.
- Utility availability at a location.
- Proximity of other mid- and high-end retail development (positive).
- Proximity of low-end commercial development (negative).
- Property size and geometry.
- Potential return on investment.

Each of these criteria carries a different weight, depending on the type of business. A bookstore may place a greater emphasis on the education and income in an area, while chain restaurants often look at the employment base in the area, so they can profit from lunch as well as dinner business. Sewer service is more important for uses that generate plenty of wastewater, such as sit-down restaurants.

Lack of competition in the area, a lack of retail development, vocal resident demand, and a positive "gut feeling" are, unfortunately, only considered very minor factors in site selection, if at all. Property taxes and leniency of zoning and architectural regulations are usually not considered at all.

A mantra among commercial developers is "retail follows rooftops." However, Madison Village only has about 3,000 residents, and population growth in eastern Lake County is at a slow pace. Among site selection specialists, the small, low-density population base of the area is a liability compared with more populated areas. The presence of a new Wal-Mart store in Madison Township, and the increased traffic the store will generate, may attract the attention of national retailers scouting for new store locations. However, they are likely to locate along the North Ridge Road/US 20 corridor near existing retail centers, not in the Madison Village center or Lake Street.

To attract new retail businesses, national retailers and their site selection specialists must be convinced to look past their traditional formulas. Lake Street and the village center could be promoted as an incubator to locally owned start-up retail businesses and restaurants as an alternative to the nearby US 20 corridor. Creating a niche market and building upon that strength through associated uses is a recommended strategy.

For example, over the past decade, downtown Willoughby has recreated itself as a restaurant and entertainment district. Building upon the private sector investment,

the City and local non-profit groups have invested in programs/events to bring people to the downtown area throughout the year. These include a summer concert series, car show, art festival, farmers market and traditional holiday events (Christmas Stroll). Willoughby also has an extensive beautification strategy with tree plantings (and lighting), flowers, public parking signage and signalized crosswalks.

4.7 Village identity

Approaching Madison Village, it is difficult to know exactly when one has crossed the township line. The development pattern changes little at the village boundary; subdivisions, frontage development, nurseries, and convenience retail scattered along the corridor. A large number of commercial buildings in the village are prefabricated or utilitarian, just as in the township. Until one sees rows of 19th century era houses or arrives in the village center, the village line sign provides the only evidence that a driver crossed into Madison Village.

Concerns about community identity tended to rank low in resident surveys conducted in communities in eastern Lake County, but it was raised as an important issue among the comprehensive planning committee. The relative silence regarding community identity bucks a growing national trend of increasing concern about the homogenization of the built environment, the decreasing influence of local culture and traditions, and a lack of rootedness and emotional attachment to a place.

Many of the recommendations made in this plan, if implemented, will over time result in a physical environment, and development pattern that will clearly distinguish Madison Village from its neighbors.

Distinctive and tasteful welcome signs should greet drivers crossing the township line. Street name signs should also break from the mold of a standard green rectangular metal sign. Public art that reflects local culture and customs, created by local artists, should be considered at gateways and strategic intersections. A more pro-active relationship with the Rabbit Run organization is one option.

4.8 Site planning and design

SITE PLANNING

Commercial site planning is guided only by the building setback, parking, and very limited landscaping requirements in the zoning code. The resulting development usually takes one of two forms. On larger lots, a commercial building will be placed in the far rear end of the lot, separated from the street by a large, featureless parking lot, much of which usually stands empty. On smaller, narrower lots, the primary building is usually close to the right-of-way, usually separated from the street by a small, often unpaved parking area. The rear of the lot remains empty and unused; an inefficient use of land. The resulting development pattern reinforces the strip-like character of Lake Street.

Responses from the resident survey show that respondents are supportive of alternatives to alternative to traditional auto-oriented retail development, where a row of buildings are set behind a large parking lot.

ARCHITECTURAL DESIGN

While the Design Review Board exists for the village downtown, here are no specific regulations governing the appearance of commercial or industrial development in Madison Village. Similarly, there are no regulations for development or remodeling of historic residential structures in the downtown area. The unique architecture and design is in this area an important characteristic of the entire Village.

Most commercial and industrial buildings in the village are designed with lost cost as the primary consideration, and usually have a very utilitarian appearance. The fact that land is cheaper, businesses have less money to invest in a structure, or that incomes are lower then in more affluent suburbs are not justifiable excuses for poor architectural design

National chains establishing a location in an area with no architectural regulations will usually build a default "prototype" building. Such buildings usually have little architectural detailing, and are designed to reinforce corporate identity and function as a sign, regardless of its compatibility with community character. National corporations will forego their prototype buildings and build a structure that better respects local character – but only if they are required to.

Responses from the resident survey, and opinions voiced by the comprehensive plan committee, express very strong support for architectural regulations. In the resident survey, for statements regarding aesthetics, respondents as a whole strongly agreed with the statements "The quality of development along US 20 east and west of the village leaves a lot to be desired" and "High-quality architecture and design, short signs, and plentiful landscaping should be required for commercial uses along US 20" Respondents were neutral to the statement "Prefab metal buildings should not be allowed in commercial and retail areas".

Architectural regulations for commercial structures should address the following:

Building mass

• Prohibit large simple building footprints; require variations in the footprint that are not superficial.

Exterior walls

- Materials: brick, stone, or a combination of masonry materials and wood. Metal pre-fabricated structures should not be permitted.
- Pattern: require repeating, offset, reveal, pilaster, projecting ribs, fenestration patterns, piers, color change, texture change, material module change.
- Base: require recognizable wainscot.
- Top: require cornice treatments, overhangs, brackets, stepped parapets.
- Four sided design: walls must include materials and design characteristics consistent with those on the front.
- Projections and recesses: require wall plane projections and recesses for long walls.
- Street facing walls: require breaking up walls with change in plane, texture, windows, or other equivalent elements that divide the wall into human scale proportions.

- Facades: require divided and proportioned using features such as windows, display areas, entrances, arcades, arbors, and awnings along a percentage of the façade.
- Building entrances: require clear definition with an awning, arcade or portico.
- Transparency: require window coverage along a percentage of a wall.
- Garage doors: require segmentation, windows, recession behind a building façade, positioning where they don't face the street.

Roof

- Require overhangs, minimum slope, regulate maximum continuous plane of roofline.
- Rooftop mechanical equipment: require screening

Building colors

- Require muted colors, limit use of primary or corporate colors.
- Limit color changes to change of plane or reveal line.

Gas station canopies

- Require support pole covers.
- Require recessed lighting, limit number of fixtures and lumens.
- Prohibit corporate branding and colors along the entire fascia.

Industrial and other non-residential uses should be subject to similar, but slightly less rigorous requirements.

As explained earlier, Madison Village may be seen as an ideal location for low-end businesses because low land costs make them economically viable. Such small businesses, along with smaller commercial developers, are more likely to build inexpensive structures. The result: metal buildings. Affordability by small businesses should not be accepted as an excuse to accept basic metal buildings in highly visible commercial areas.

The existing Design Review Board could act as the review body should the Village enact various design standards. An overlay zone could be created designated various areas where review should occur. For example, Historic Commercial Overlay Zone or

Historic Residential Overlay Zone.

SIGNS

"When everybody shouts, nobody gets heard." For signs to be effective, they must not barrage viewers with information what will soon be forgotten, but stand out on their own. While many businesses instinctively view small signs as less effective than larger signs, the message they convey is distinct and better understood with less competition from other signs



High-rise signs such as this are often seen as "visual pollution" that detracts from the scenic quality of an area, and forces unwanted commercial advertising onto the viewshed of surrounding properties.

competing for the viewer's attention. The presence of smaller signs reduces visual clutter, and thus improves the appearance of a commercial area. Appealing signs that are compatible with local character can contribute to the village center and commercial districts, reinforce the distinct identity of the village, cultivate local pride and invite travelers to stop.

Freestanding signs in commercial zoning districts should be limited to monumenttype signs with a maximum height of six feet. Signs mounted on the roof should not be permitted, because their appearance detracts from the architectural design of the host building more than other sign types.

In the resident survey, respondents favored the use of short signs by the Interstate 90 interchange, as opposed to tall high-rise signs that tower above the landscape. High-rise signs can detract from a scenic view along both Interstate 90 and River Road, intrude into the viewshed of properties surrounding the site for hundreds or thousands of feet, and detract from the quaint small-town character of the adjacent village center.

There are alternatives to high-rise signs, such as motorist information signs maintained by ODOT along Interstate 90. Signs mounted on towers or cupolas integrated into the building provide high visibility in a more tasteful manner than freestanding high-rise signs. This plan encourages limiting freestanding sign height to 30' when the sign is intended to be seen from Interstate 90.

In the B-3, B-4 and B-5 zoning districts, there are no size, setback or height requirements; the code language reads "Signs in [zoning district] shall be permitted only after prior approval and authorization by the Planning Commission." Such open-ended regulations will create problems in the future, because of its arbitrary and overly permissive nature. This plan encourages fixed standards for the B-3, B-4 and B-5 district that specifically regulate the size, placement, height and design of signs.

The village sign regulations are difficult to interpret. There are no illustrations or tables, and the language includes a great deal of legalese. The following is typical of language found in the sign code:

A business located in a "B-1" District may have one (1) sign per building advertising the nature of the business, merchandise, products, or service. The total aggregate area of said sign shall not exceed one and one-half (1.5) square feet of sign for each lineal foot of frontage of said building, provided, however, that no sign shall exceed one hundred (100) square feet and no sign shall be located within five percent (5%) of said frontage at each end of said building. Excepted as provided in Section 9.10.4(a), said sign shall be located on the same lot as said building. Said sign shall have a minimum front setback of five feet (5'), shall have a minimum side setback of five feet (5'), and shall have a minimum height of eight feet (8') to the bottom of the sign.

The use of electronic message centers is growing, but the sign code has no provisions regulating them. This plan recommends that electronic message centers be prohibited from the village center, and areas where they may be visible from Interstate 90. Where permitted, the message screen should remain in a static display

for a minimum of one to five minutes, so drivers are not distracted. The message change should be instantaneous; no scrolling or animation effects.

LANDSCAPING

Although Madison Village is located in the heart of Northeast Ohio's nursery center, the landscaping requirements in the zoning code comprise just one paragraph. Landscaping requirements are a standard feature in most modern land use regulations. Landscaping on commercial and industrial sites serves the following functions:

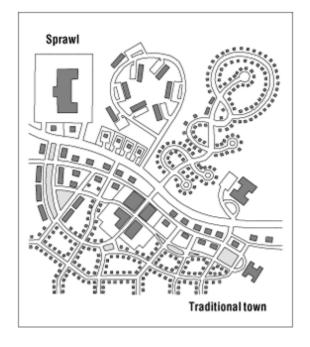
- Buffers between incompatible uses or site areas.
- Shade and climate control
- Air purification and control airborne particulates
- Wildlife habitat.
- Erosion and stormwater runoff control.
- Control of noxious weeds, invasive plants and exotic plants;
- Encourage native and/or adaptive plants.
- Preserve existing trees and vegetation.
- Provide an attractive appearance in areas of public use or view.
- Improve natural and recreational areas.
- Screen service areas and structures.
- Reinforce a pedestrian friendly environment.
- Break up building mass and soften architectural materials.
- Enhance the quality and appearance of the built environment.

Comprehensive landscaping regulations should require landscaping bufferyards at the front, side and rear of the site, along buildings, driveway throats, islands that cap and break up parking rows, and islands that divide large parking areas into smaller, more manageable units. Required buffers at the front of a site must be deep enough to accommodate future road widening projects. There should also be minimum requirements for the number of trees and shrubs, the types and sizes of trees and plants to be used in landscaped areas, and tree protection requirements.

4.9 Traditional neighborhood development

Madison Village is one a few communities with traditional town centers. New planning techniques throughout the US encourages the development of new mixed-use urban or traditional town centers, to reinforce and preserve the identity and character of an area, and provide an alternative to frontage and large lot development normally found in exurban areas.

A pattern of traditional neighborhood development, as opposed to conventional suburban subdivisions, would address some



concerns raised during the planning process; preserving the vitality of the village center, lack of housing variety and options, reinforcing a traditional small-town identity and sense of place, promoting connectivity within the village, and preserving existing nurseries and agricultural uses.

If future conditions warrant, the expansion of the downtown core could follow traditional design standards rather than have the pods and cul-de-sacs of typical suburban development. This includes the following elements:

- A discernible center; a square, green or memorable street corner.
- A variety of dwelling types, including single-family houses and townhouses, with some accessory or mother-in-law units.
- Small playgrounds accessible to every dwelling, ideally located no more than a tenth of a mile away.
- At the northern end of the village, a small commercial center with shops, restaurants, cafes and other light-intensity commercial uses, providing "third place" for village residents and those in surrounding areas.
- Streets within the neighborhood form a connected network, which disperses traffic by providing a variety of pedestrian and vehicular routes to any destination.
- Required building setbacks are small, and buildings in the neighborhood center are placed close to the street, creating a well-defined outdoor room.
- The location of parking lots and garage doors is arranged so it does not dominate the streetscape; ideally it is relegated to the rear of buildings, usually accessed by alleys.
- Parks and public space front streets to create safe spaces and a "common living room"; they should not be hidden behind houses.
- Frontages and lot sizes should vary on the same block, to prevent visual monotony.

4.10 The Basics of Transfer of development rights

Transfer of development rights (TDR) is an effective tool that has been used to protect farmland and open space in one part of a community, while encouraging development in another. Transfer of development rights programs allow landowners to voluntarily transfer the right to develop one parcel of land, usually an agricultural or environmentally sensitive area, to a different parcel of land in an area where higher-than-normal density would be tolerated and desirable. The parcel of land where the rights originate is called the "sending" parcel. When the rights are transferred from a sending parcel, the land is restricted with a permanent conservation easement, and the development potential is frozen. The parcel of land where rights are transferred is called the "receiving" parcel. Buying these rights generally allows the owner of a receiving parcel to build at a higher density than normally permitted by the base zoning.

Transfer of development rights programs have been used in other areas of the country for the preservation or protection of open space, natural resources, farmland, and urban areas of historical importance, but it has not been used in Ohio.

See appendix for detailed case study in Madison Village and Madison Township.

4.11 Agricultural preservation

The nursery industry remains at the forefront of Lake County agriculture. The 1998 Census of Horticultural Specialties counted 68 horticultural operations in the county, generating \$59,153,000 in total sales, and \$54,656,000 in wholesale sales. The Nursery Growers of Lake County have tallied over 100 nurseries in Lake County, generating an estimated \$90,000,000 in annual wholesale sales. In 1983, 2,816 acres in Lake County were used for horticultural operations. In 1999, 5,000 acres of CAUV land was used for horticultural operations. The majority of nurseries in Lake County are in Madison Village, Madison Township, Perry Township and North Perry Village, north of Interstate 90.

Madison Villages A-1 zone allows agricultural as the only permitted use. Other uses are considered accessory to the agricultural activity or are required to obtain a conditional use permit.

Increasing urbanization, and its impact on runoff patterns and groundwater supply, is a threat to the nursery industry in the village and eastern Lake County. Grading for adjacent residential development changes the established natural drainage pattern in areas near nurseries, directing stormwater runoff away from nursery sites. Increasing impermeable surface in an area near the nursery, such as building a parking lot where water drains to a storm sewer or ditch, can decrease the amount of groundwater available at a nursery site. Impact to nurseries from altered hydrology is not considered when reviewing a subdivision or other proposed non-agricultural development.

As well as transfer of development rights and purchase of development rights, there are other tools available to preserve agricultural uses in Madison Village.

CAUV PROGRAM

Locally, farmers can enroll in the Current Agricultural Use Value (CAUV) program. CAUV is a voluntary real estate tax assessment program that is the result of a referendum passed by Ohio voters in November 1973. Under CAUV, owners of farm tracts 10 acres or larger are given the opportunity to have their parcels taxed according to their value in agriculture. If the land was not part of the CAUV program, the tax value could be considered the speculative value of non-farm development, or what would be full market value.

According to state statutes, a landowner must devote the parcel "exclusively to agricultural use" to qualify for use value assessment. Agricultural land that lies fallow for one year is also eligible for CAUV.

A farmer that converts land to a non-agricultural use while enrolled in the CAUV program must pay a penalty equal to the tax savings over the past three years. According to the Lake County Auditor, over 680 acres is currently enrolled in this program in Madison Village.

Protecting farmland helps communities maintain their semi-rural atmosphere and aids in reducing future demands for costly new community services, including road maintenance. Local, state and national studies have shown the economic balance

and benefit provided with active agriculture in a community. Local organizations can assist local land owners interested in pursuing preservation measures.

CONSERVATION EASEMENTS

Landowners have the option to extinguish the right to develop the land that they own. They may do so by establishing a conservation easement, which will protect the land from being developed. Agricultural conservation easements are designed specifically to protect farmland from development and to keep it available for agricultural land uses. The landowner retains ownership and all the other rights of ownership of the parcel. Easements may apply to the entire parcel or a portion of the parcel; most are permanent. All conservation easements legally bind future landowners forever or for the term of the easement.

There are currently two easement purchase programs available to compensate landowners for protecting their land with an agricultural conservation easement. Landowners may also donate all or a portion of their easement and receive income and estate tax benefits from giving up the easement value of their property.

OHIO AGRICULTURAL EASEMENT PURCHASE PROGRAM (AEPP)

The Ohio Agricultural Easement Purchase Program (AEPP) is a part of the Clean Ohio fund which provides grants to preserve farmland, clean up brownfields and to create recreational green spaces in Ohio. The AEPP requires a minimum 25% monetary match or landowner donation of 25% of the appraised value of the easement and a 40 acre minimum parcel of land. At the publication date of this plan, the AEPP will pay a maximum of \$2,000 per acre and \$500,000 per farm to successful applicants. Applications are made on behalf of landowners by local land trusts or by the Lake County Soil & Water Conservation District. An annual application period usually opens in the spring. The factors which determine which applications are selected include soil quality, proximity to other protected areas, use of best management practices, local support and planning.

FEDERAL FARM AND RANCH LANDS PROTECTION PROGRAM (FRPP)

The Farm and Ranch Lands Protection Program (FRPP) provides matching funds to State, Tribal or local governments and non-governmental organizations with existing farm and ranch land protection programs to purchase conservation easements. The FRPP will pay 50% of the appraised fair market value of the easement and requires a 25% minimum match from a governmental entity and a 25% maximum match from the landowner. To qualify, the land must contain prime, unique or other productive soil, be covered by a conservation plan for any highly erodible land, be large enough to sustain agricultural production, be accessible to markets for what the land produces, be surrounded by parcels of land that can support long-term agricultural production and be owned by an individual or entity that does not have an adjusted gross income that exceeds \$2.5 million.

Applications are made on behalf of landowners by local land trusts or by the Lake County Soil & Water Conservation District. The annual application period is in the spring.

RIGHT TO FARM

A farmer in Medina County got a ticket for disturbing the peace after a neighbor complained that he was out in the fields too late. A homeowner in Preble County threatened to file a lawsuit because a neighbor's tractor kept him from hearing his television. Neighbors sued a farmer in Summit County for using a device that keeps birds out of fields by mimicking the sound of shotgun blasts. The lawsuit was dropped.

Ohio has a Right to Farm Act that in most cases protects farmers from nuisance suits over externalities caused by normal farming operations; sound, smell, traffic, dust, vibration, and chemical use. Right to Farm legislation does not protect those who operate negligently or illegally.

A county commissioner in Larimer County, Colorado wrote The Code of the West in 1995. The Code is an etiquette manual intended to remind suburban refugees that rural areas are not necessarily romantic or bucolic; municipal services may be lacking, farms can create unpleasant externalities, and danger from forest fires and flash floods may be a constant threat.

Many rural and urbanizing countries followed the lead of Larimer County, and now issue advisory guides similar to the Code of the West, for those contemplating moving into exurban and rural area. Reference to these guides is added as a plat note on new subdivisions.

Madison Village does not have an equivalent to the Code of the West, although it can be easily drafted. The Leroy Township Comprehensive Plan includes the "Code of the Exurbs", inspired by the Code of the West and adapted to northeast Ohio. Prospective exurban and rural residents need to be aware of conflicts between agricultural and residential uses, and of externalities that are foreign to their former urban and suburban settings.

AGRITOURISM

Agritourism is a commercial enterprise at a working farm, conducted for the enjoyment of visitors while generating supplemental income for the owner. Agritourism opportunities include outdoors recreation (horseback riding, cross country skiing), direct sales (self-pick farms, farm stands), educational experiences (tours, historical exhibits), accommodations (bed and breakfast inns), and entertainment (corn mazes, hayrides, concerts).

Agritourism is a growing sector of the tourism trade. About 62.4 million Americans – nearly 30% of the U.S. population – visited a farm during a 12-month period in 2000-2001, according to the 2000 National Survey on Recreation and the Environment.

Several counties in California sponsor "farm trails," which are similar to wine routes. Farms along the trail offer tours, direct sales to the public, and occasionally lodging and dining. The California Agricultural Homestay Bill exempts farms and ranching operations that offer overnight stays from the more stringent requirements of operating a commercial restaurant. To qualify for overnight stays, the farms and

ranches must produce agricultural products as their primary source of income. Farmers are limited to six guest rooms and 15 visitors a night.

In Ohio, Freshwater Farms in Urbana offers tours of their hatchery, and operates a farm market offering products from the hatchery and other area agricultural operations.

The most visible agritourism-related activities in Lake County can be found at wineries in Madison Township. Chalet Debonne offers a variety of attractions appealing to tourists, including tours, tasting, a gift shop, an amphitheatre for concerts, live entertainment, and outdoor dining. Claire's Grand River Winery offers tours by appointment. Maple Ridge Vineyards offers on-premises wine sales, tasting and tours. There is the opportunity to develop more amenities that could attract those touring Winery District visitors, such as bed and breakfast inns, restaurants and regular tours.

Some nurseries in Lake County offer sales direct to the public, but there is no coordinated effort to promote local nurseries as a destination to tourists or day trippers.

Zoning restrictions can limit agricultural tourism opportunities in many Lake County communities, including Madison Village. In the village, most agricultural operations take place in the R-1 residential zoning district. Zoning regulations may allow agriculture in residential zoning districts, but not always agritourism related uses and businesses. This plan recommends revisiting permitted uses in the district, and removing barriers that may prevent agritourism uses at village nurseries and farms.

4.12 Goals and policies

Each primary paragraph (in bold type) is a statement of a goal. The subparagraphs are policies for implementing the goal. Some goals and policies related to land use are found in other elements. The Comprehensive Plan map will also display suggested land use/zoning patterns.

- LU-1 Contemporary, effective land use planning tools will be used to preserve what remains of the semi-rural character of the village.
- LU-1-p1 Consider adopting a new zoning resolution, to implement the goals and objectives of this plan.
- LU-1-p2 Review the Comprehensive Plan and zoning resolution annually, to keep ahead of emerging land use trends in the region.
- LU-2 Residential development will be in a form that reinforces a unique sense of place, and make Madison Village distinct from surrounding communities.
- LU-2-p1 Where feasible, encourage higher density residential development, following a traditional neighborhood model, closer to the village center.

LU-2-p2 Create a new Residential Conservation Development zoning to allow for creative development with a dedicated open space component to protect the natural features of the site. LU-2-p3 Place parks and public space in the town center area where they will front streets and create vibrant, safe gathering areas; not behind houses where they serve as virtual extensions of private rear yards. LU-2-p4 Require a width-to-depth ratio of 1:3 or less on new residential lots, so new "bowling alley lots" are not created. LU-2-p5 Increase the minimum front yard setbacks for residential building lots fronting collector and arterial roads, to reduce the visual impact of future frontage development. LU-2-p6 Consider impact fees for new residential development, to pay for needed community amenities such as parks and upgraded utilities. LU-2-p7 Implement architectural design requirements for residences that may be located in a traditional village district. LU-2-p8 Enforce zoning requirements that prohibit disruptive home occupations, such as retail uses, construction vehicle and heavy equipment storage, vehicle repair and body work, and contractor yards. LU-2-p9 Establish standards for front and rear yard tree planting requirements in residential areas, to decrease the visual impact of frontage development, provide shade, provide filtration of airborne pollutants, and help reinforce the identity of Madison Village as a center of the nursery industry. LU-3 Commercial and industrial areas will be well-planned, appropriately located and sized, and encourage uses that are not disruptive or present an unflattering impression of the village to visitors. LU-3-p1 Create an overlay district for the village center. Limit uses in the district that do not generate pedestrian activity and street animation, prohibiting them in ground-level storefront space on Main Street, or making them subject to conditional review. Establish site planning and design requirements to insure the future architectural integrity and pedestrian-oriented nature of the village center. LU-3-p2 Examine the location and acreage of commercial zoned land in the village. Project future needs based on market conditions.

Discourage strip commercial zoning and the incremental expansion of

Limit the acreage industrial zoned land in the village, to only the amount

Truck stops and/or travel plazas should be clearly defined within the zoning text, and prohibited as a use by right or conditional use.

commercial zoned parcels along collector and arterial roads.

needed to realistically meet future demand.

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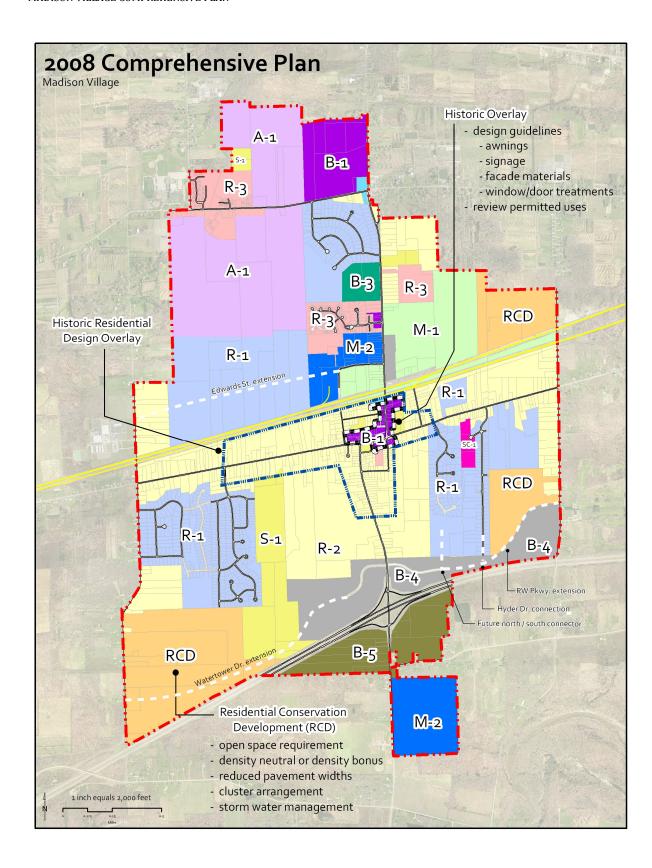
LU-3-p3

LU-3-p4

LU-3-p5

- LU-3-p6 When market conditions warrant, examine the feasibility of commercial zoning expansion along the I-90 corridor through Watertower Drive and RW Parkway extensions.
- LU-4 Commercial and retail development will be attractive, inviting, convenient, and of a high quality.
- LU-4-p1 Implement sign design requirements to contribute to a built environment that will differentiate Madison Village from adjacent municipalities, and reinforce the village's unique identity and character. Reduce the maximum area and height of commercial signs, and basing building-mounted sign size on wall length. Ground mounted signage should be encouraged and billboards should be prohibited.
- LU-4-p2 Implement architectural design requirements for commercial and industrial uses to promote quality architecture, and enhance sense of place as suburban development and growth pressure encroach further into eastern Lake County.
- LU-4-p3 Implement site planning requirements for commercial and industrial uses, to encourage and reward high quality development. Discourage less attractive and less enduring alternatives.
- LU-4-p4 Establish standards for landscaping and screening, to minimize the impact of new development on the surrounding neighborhood, reduce heat islands, promote a sylvan visual environment, and reinforce the identity of Madison Village as a center of the nursery industry.
- LU-4-p5 Establish controls on the direction and maximum height of lighting, and the glare from reflective materials used on the exterior of structures, to prevent glare and light pollution, enhance semi-rural character, and encourage energy conservation.
- LU-4-p6 Locate, design and develop industrial sites and areas in a manner that reinforces a distinct sense of place, and offers a positive impression of Madison Village.
- LU-4-p7 Create basic community branding to help reinforce a distinct identity, identify and market Madison Village much like a product.
- LU-4-p8 Adopting site planning requirements that encourage a hybrid site plan, with parking split between the side and rear of a building, and "retail villages," where many buildings are oriented towards an internal drive or road network that recreates the feel of a village street. Create standards that will promote a pedestrian-friendly environment inside shopping centers, such as requiring internal plazas and a walkway system connecting buildings and parking areas on the site. Requiring improved pedestrian connections between buildings and the sidewalk are also recommended.
- LU-5 The nursery industry and agriculture will continue to be the signature land use in Madison Village.

- LU-5-p1 Permit agritourism related businesses, such as bed and breakfast inns, tours, commercial hay rides, u-pick operations, corn mazes and the like as accessory uses to working agricultural uses, to allow such uses to remain economically viable in the face of exurban development.
- LU-5-p2 Encourage the participation of agricultural trade association members in town planning activities and boards.
- LU-5-p3 Encourage property owners to participate in CAUV programs.
- LU-5-p4 Consider the agricultural potential and value of unique soils when evaluating plans for large-scale development.
- LU-5-p5 Consider impacts on existing agricultural operations as criteria for development approval, and require mitigation for any detrimental impacts. This includes considering the impact to the drainage pattern and water supply on existing agricultural operations and fallow agricultural land.
- LU-5-p6 Provide adequate buffers with development adjacent to agricultural land, to minimize conflicts and complaints concerning standard agricultural practices. Update zoning regulations to include guidelines for design elements to help achieve compatibility between agricultural and non-agricultural uses.
- LU-5-p7 Further examine the use of transfer of development rights to allow agricultural land owners to reap the financial benefit of land development, while ensuring that the land remains in agricultural production.



5 Transportation

5.1 Introduction

At a casual glance, it appears that transportation is not a major issue in Madison Village. There is a perception that congestion is growing, but data from the Northeast Ohio Areawide Coordinating Agency (NOACA) and the Ohio Department of Transportation (ODOT) show little evidence of problems. According to these agencies, there are no intersections or uses that generate large amounts of traffic. Local officials and residents will disagree. Even with what appears like sparse traffic, though, Madison Village still faces challenges regarding transportation.

Transportation infrastructure is very expensive, especially for an outlying Village area, and it has major impacts on how residents live. It both influences and is influenced by land development. Future transportation plans must consider a diverse range of



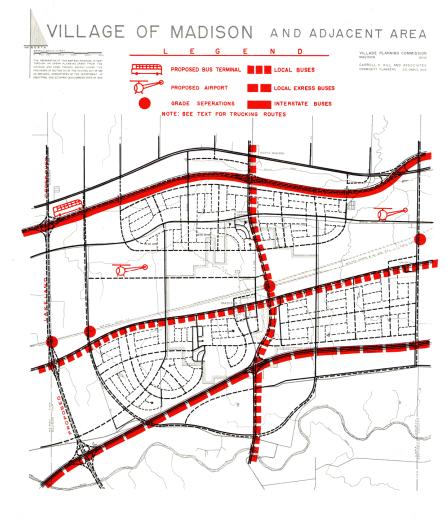
users, including residents of all ages and abilities, business commuters, visitors, commercial traffic, and those traveling by foot or bicycle.

An effective transportation plan should not be measured in how it would potentially decreases travel times or increase traffic speed, but rather how it will shape future development, improve the quality of life for residents, and preserve small-town character.

Madison Village is not an island, and transportation planning must consider how roads and trails in the community function as part of a regional transportation network.

5.2 1963 Comprehensive Plan

The 1963 Madison Village Comprehensive Plan anticipated that Madison Village would be a much larger community than it is now. The transportation section of the plan included ambitious projects such as a bypass around the village center with a gradeseparated railroad crossing, and railroad grade separation for County Line Road and Wood Road, which would be part of a beltway of arterial roads around the village. The village would be surrounded on three sides by limited-access highways. A proposed network of arterial and collector streets would cross the village and extend in all directions into Madison Township. The plan also suggested sites for an airport and intercity bus terminal, and recommended upgrading County Line Road in anticipation of commercial shipping activities at the Madison Dock.



PROPOSED MAJOR TRANSPORTATION FACILITIES

Madison Village never grew

to be the satellite city anticipated by the 1963 plan. None of the improvements and projects proposed in the plan were built.

5.3 Roads

With the exception of road paving projects and the construction of streets internal to residential subdivisions, the transportation network in Madison Village has changed little through the decades. However, increased vehicle ownership, an influx of new residents who commute to jobs outside the community, retail development to the north in Madison Township, increased interstate trucking activity, and changing lifestyles have all impacted village roads.

TRAFFIC VOLUME

Table 5.1 shows traffic counts along selected road sections in the village, based on data collected in 2002 and 2005. Historic data from the 1963 plan is also included.

Table 5.1 Traffic volume Madison Village					
Road section		Average	daily traff	ic (ADT)	
koda section	1960	1992	1999	2002	2005
Lake St/River St (OH 528) north of Main St (OH 84)	3,850	10,030	9,090	9,110	8,990
Lake St/River St (OH 528) south of Main St (OH 84)	3,020	10,030	9,090	10,040	8,990
River St (OH 528) south of I-90	1,850	5,310	5,840	6,180	6,540
Main St (OH 84) west of River St (OH 528)	2,850	5,670	5,980	4,130	4,700
Main St (OH 84) between River St and Lake St (OH 528)	4,160	10,010	8,160	9,800	9,670
Main St (OH 84) east of Lake St (OH 528)	2,120	5,450	4,080	4,810	4,180
I-90 west of River St (OH 528)	5,320	27,040	32,910	33,270	38,970
I-90 east of River St (OH 528)	5,620	24,280	33,040	31,340	36,070
Warner Rd (OH 307) east of River St (OH 528)	460	1,390	1,220	3,050	1,730
Traffic count data is not available for other roads in the (Ohio Department of Transportation)	e village.				

Data from the Ohio Department of Transportation shows traffic volume decreasing slightly on north-south roads and Main Street (OH 84) east of Lake Street, and increasing slightly on east-west routes between 1992 and 2005.

Traffic on US 20 in Madison Township has decreased in recent years, while traffic on I-90 is increasing. Data collected by ODOT suggests that I-90 is increasingly being used for east-west traffic that would otherwise use North Ridge Road/US 20.

Table 5.2 Traffic volume – vehicle type Madison Village				
Road section	Average a	laily traffic	(ADT): Clas	s B and C
Rodu Section	1992	% 1992	2005	% 2005
Lake St/River St (OH 528) north of Main St (OH 84)	360	3.5%	400	4.4%
Lake St/River St (OH 528) south of Main St (OH 84)	360	3.5%	400	4.4%
River St (OH 528) south of I-90	340	6.4%	460	7.0%
Main St (OH 84) west of River St (OH 528)	240	4.2%	310	6.6%
Main St (OH 84) between River St and Lake St (OH 528)	390	3.9%	380	3.9%
Main St (OH 84) east of Lake St (OH 528)	80	1.5%	130	3.1%
I-90 west of River St (OH 528)	7,440	2.8%	10,530	3.7%
I-90 east of River St (OH 528)	7,350	3.0%	10,520	3.4%
Warner Rd (OH 307) east of River St (OH 528)	70	5.0%	100	5.7%
Class B vehicle: GVWR 26,001 or more pounds (11,793 kg). C (11,793 kg) designed to transport 16 or more persons; or that or from school, or carry hazardous materials in amounts requi (Ohio Department of Transportation)	t carry 15 or	less people t		

On most roads in the village where traffic counts were conducted, the percentage of heavy truck traffic has increased between 1992 and 2005. (Table 5.2). The largest increases were recorded on River Street south of I-90, and Main Street west of River Street.

RAILROAD GRADE CROSSINGS

Since the construction of the Cleveland, Painesville and Ashtabula Railroad in 1851, Madison Village has been bisected by a busy railroad corridor. The two-track CSX Erie West Subdivision and single-track Norfolk Southern Lake Erie District lines cross Dayton Road, Lake Street and Bates Road at grade.

116 scheduled trains per day – an average of one every twelve minutes – pass through the village. (Table 5.3) Railroad traffic is expected to increase as global trade and the use of intermodal (travel trailer to train) shipping continues to grow.



The noise and vibration caused by heavy rail traffic could make increased residential development in some areas near the center of the village impractical.

Table 5.3 Railroad crossings Madison Village	5							
Street	AARDOT	Wai	rning dev	ices	Th	rough tra	ins	Road
Street	AAKDOI	Crossbucks	Lights	Gates	Day	Switching	Night	ADT
Dayton Road/LC 41 (NS)	472018M	4	4	3	11	0	11	* 1,645
Lake Street/OH 528 (NS)	472017F	2	2	4	11	0	11	8,990
Bates Road/LC 25 (NS)	472015S	2	2	4	11	0	11	975
Dayton Road/LC 41 (CSX)	523828X	4	4	3	47	8	38	* 890
Lake Street/OH 528 (CSX)	523829E	2	2	2	47	8	39	8,990
Bates Road/LC 25 (CSX)	523830Y	2	2	2	47	8	39	975
* Inconsistent data; per RRIS Crossing Information Inventory. (Ohio Rail Development Commission)								

Between January 1978 and April 2007, there were 23 train-vehicle collisions on the three grade crossings in the village. Accidents resulted in four injuries and three deaths. (Table 5.4)

Table 5.4 Railroad crossing accidents 1978-present Madison Village								
Street	AARDOT	Accidents	Injuries	Deaths				
Dayton Road/LC 41 (NS)	472018M	7	1	1				
Lake Street/OH 528 (NS)	472017F	4	1	0				
Bates Road/LC 25 (NS)	472015S	1	1	0				
Dayton Road/LC 41 (CSX)	523828X	4	1	1				
Lake Street/OH 528 (CSX)	523829E	2	0	1				
Bates Road/LC 25 (CSX)	523830Y	5	unavailable	unavailable				
Specific accident data for AARDOT 523830Y is	unavailable. (Fede	eral Railroad Adı	ministration)					

IMPACT OF FRONTAGE DEVELOPMENT

The normal pattern of residential development on longer arterial and collector roads, such as Main Street/South Ridge Road, Bates Road and Dayton Road, is the subdivision of large but narrow lots with frontage on the existing road. Such development affects the village road system in several ways.

- The many individual driveways create points of conflict that make the road less safe for pedestrians, cyclists and drivers. (See the access management section for more details.)
- A single family house generates an average of 9.6 vehicle trips per day. Property
 owners at the end of arterial and collector roads closer to the village face a
 heavier share of traffic on the road, generated by residential frontage
 development at the far end of the roads.
- The land division pattern makes it difficult to create connecting north-south or east-west roads, or develop interior land, without demolishing houses.
- The cost of development shifts from the builder, who would normally be required to build roads in a subdivision, to the village, which built the existing road where the lot has frontage. The village essentially subsidizes frontage development.

Frontage development should be subject to an impact fee to offset the cost of the initial construction of the road, and public utilities that serve it. Fees should make the cost of frontage development about the same as subdivision development.

Implementing more flexible street design standards, for instance allowing narrower pavement width for streets that will serve few houses, will decrease the cost of developing away from existing through streets.

PERCEPTIONS OF TRAFFIC CONGESTION

There is a perception among many village residents, and those living in nearby communities, that traffic congestion is a growing problem in the area.

According to data from NOACA and ODOT, no roads in the area are considered congested. The amount of traffic carried on Lake Street is lower than the majority of two-lane arterial roads in the region, and roughly equal to busier two lane roads in the area. Traffic volume on the road is below capacity for lower levels of service. However, the road is not without other issues.

Why do some residents feel traffic is congested and generally bad, when the reality is different? The exurban setting of the village may play a role in how traffic is perceived. What appears to be freeflowing traffic to an urban or suburban resident, a traffic engineer, or a planner, may be seen as congestion in the eyes of those living in eastern Lake County. In an exurban area such as eastern Lake County, residents may have the expectation that traffic will reflect their low-density, semi-rural/semi-suburban surroundings, and be scattered and light. Anything more might be perceived as "congestion", even if there are few traffic delays, because it seems out of context with an exurban environment. Residents also spend more time in their cars than those in more densely populated areas, so they may have more exposure to traffic problems. Whether or not congestion actually exists, the perception of it affects how residents feel about their quality of life.

5.4 Comprehensive Plan Committee desired improvements

The results of a transportation workshop held with the Madison Village/Madison Township Comprehensive Plan Committee are a "wish list" of future road improvement projects for the village and township. Desired road improvements in or directly affecting the village are detailed below.

RAILROAD GRADE-SEPARATED CROSSING

For several decades, a grade-separated rail crossing has been a desire of both Madison Village and Madison Township officials. The 1963 Comprehensive Plan proposed grade-separated railroad crossings for County Line Road and Wood Road, and a grade-separated crossing on a new bypass that would be routed east of Lake Street and River Street. The consensus in contemporary railway design is to avoid the use of grade-crossings. A grade-separated crossing was considered a high priority among those in the Comprehensive Plan Committee.

There are several geometric and siting issues that make a grade-separated crossing difficult in Madison.

- At Townline Road and Wood Road, low traffic volume cannot justify the expense of bridging the CSX and Norfolk Southern tracks.
- At Dayton Road, the railroad crossing is about 550 feet from Main Street, which
 would require a very steep grade (5% or more) to provide a 22.5 feet overhead
 clearance. Heaver vehicles would likely avoid such a steep grade in favor of
 existing, more accessible crossings.
- At Lake Street, the embankment necessary for a grade-separated crossing would require the demolition of many residential, commercial and industrial structures, and prevent access to many businesses along the road. The location is ideal, but the necessary property acquisition makes it impractical.
- At Bates Road, low traffic volume makes justification of the expense of grade-separation difficult. The cost of crossing at Bates Road would be much higher than at other points, because the rights-of-way of the CSX and Norfolk Southern are about 350 feet apart, requiring a longer bridge. It would also increase traffic on a road that is lined with residential frontage development.
- At County Line Road, low traffic volume, the need for a steep grade from Middle Ridge Road (6% or more), and separation of the CSX and Norfolk Southern rights-of-way make a crossing at this point impractical.

A bypass following the route suggested in the 1963 plan would be difficult to build today; barriers include the Fairview Cemetery, Madison Educational Campus, Huntington Woods subdivision, and Lake County Engineer Madison Garage on Samuel Street.

Continuing River Road north of Main Street also presents numerous barriers; commercial structures on Main Street, a small stream that flows to Arcola Creek, industrial development on Edwards Street, and a large patio home development.

The cost of grade separation projects similar to what could be built in Madison ranges from \$5 million to \$15 million.

Ohio is one of the first states in the nation to establish a successful program to specifically address rail/highway grade separation projects. The Rail Grade Separation Program is a 10 year, \$200 million program established in 2000 by the Ohio Department of Transportation (ODOT) and the Ohio Rail Development Commission (ORDC). The program addresses safety, mobility and economic development concerns for Ohio's local communities. The Rail Grade Separation Program provided \$3.6 million for the construction of the \$13.9 million Heisley Road rail crossing in Mentor. A crossing at Lake Street would meet the program goals – more than 30 trains a day, and more than 1,000 vehicle trips per day – but the demolition and property acquisition required makes it an unattractive option.

This plan recognizes the obvious benefits of a grade-separated rail crossing – increased safety, smoother traffic flow, and uninterrupted access for emergency vehicles – and endorses a crossing where it would be practical, and where it would preserve the integrity and commercial vibrancy of the historic village center.

However, geometric, siting, and financial obstacles at each potential crossing point in Madison Village and Madison Township make it impractical to bridge the CSX and Norfolk Southern tracks. This plan recommends improving existing grade crossings, including signage, lighting, pavement markings, wayside horns, and use of barriers that prevent drivers from circumventing the gates (StopGate and similar systems), to reduce the risk of accidents and fatalities.

One advantage of frequent rail traffic and the inconvenience of at-grade crossings: it can limit through traffic by trucks, and thus provide a form of traffic calming.

LAKE STREET IMPROVEMENTS

Along with Interstate 90 and North Ridge Road/US 20. Lake Street is one of the heaviest traveled roads in Madison Village and Madison Township. Lake Street serves as the primary arterial connecting residential areas in North Madison with I-90, and residential areas in Madison Village and the south end of Madison Township with retail areas along US 20. The Comprehensive Plan committee expressed support for improving



Lake Street to better accommodate additional traffic.

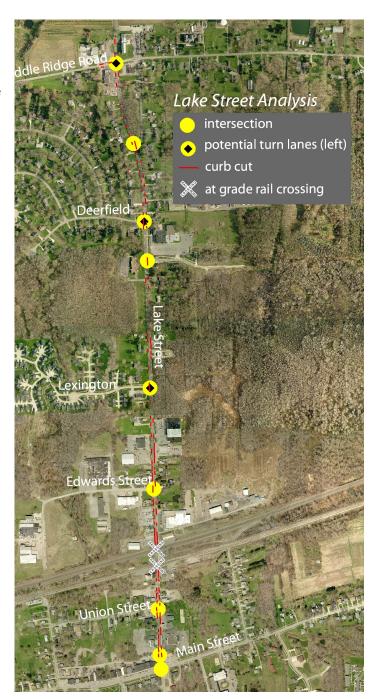
Although traffic volume on Interstate 90 has increased from the time it was dedicated, in recent years traffic volume on Lake Street actually fell; from 10,030 vehicles per day in 1992 to 8,990 in 2005. Of the 2,305 road segments cataloged in the Northeast Ohio Areawide Coordinating Agency (NOACA) Traffic Congestion System, segments of Lake Street ranks among the least congested, from 1,805 to 2,019; and its vehicle-to-capacity ratio is among the lowest in the region.

Widening the corridor may not be warranted at this time, but the Village could consider increasing the front setback off Lake Street for all new building. This is a proactive step and will reduce conflicts should the improvement occur.

Utilizing the existing right-of-way, turning lanes may be a more economically feasible improvement to the Lake Street corridor. The Middle Ridge Road, Lexington Ave., and Deerfield intersections with Lake Street are the primary candidates for left hand turning lanes.

Large scale widening may be feasible at Middle Ridge Road should conditions warrant in the future.

Increasing the capacity of Lake Street could affect River Street, the link between Lake Street, the Madison Village core, and I-90. River Street is an important gateway to Madison Village, and visually reinforces its "quaint" character. For much of its length between I-90 and the village center, River Street is lined with historic single-family houses. Improvements to River Street to accommodate increased traffic could harm its unique visual qualities and residential nature.



RW PARKWAY DRIVE EXTENSION

RW Parkway, a new addition to the Madison Village street grid, is intended to provide access to properties adjacent to I-90 near River Street/OH 528, and promote the development of commercial, industrial and service uses near the Interstate exit. The Comprehensive Plan committee supported extending RW Parkway from River Street/OH 84 east to Bates Road.



This plan supports increased road connectivity in the village. Greater connectivity promotes mobility and reduces congestion by providing multiple routes of travel. Connecting the eastern end of RW Parkway to Bates Road would improve connectivity, and provide better access to businesses. The perceived shortcomings of extending RW Parkway – traffic may increase slightly on Bates Road, and decrease slightly on Main Street in the village center – are outweighed by the benefits of increased connectivity. The Village should also consider potential north-south connections from RW Parkway to existing roads.

WATERTOWER DRIVE EXTENSION / CONNECTON TO DAYTON ROAD

Similar to RW Parkway, Watertower Drive is a relatively new addition to the Madison Village street grid. It is intended to provide access to properties adjacent to I-90 near River Street/OH 528, and promote the development of commercial, industrial and service uses near the Interstate exit. The Comprehensive Plan committee supported extending Watertower Drive from River Street/OH 84 west to Dayton Road.



This will yield more opportunity for commercial and residential land uses (if warranted) and provide a secondary east – west route through the Village potential decreasing the traffic demand in the Village core.

I-90 TRAFFIC SIGNALIZATION

Future developments (residential and commercial) near the I-90 / SR 528 interchange may warrant coordinated traffic lights at the east and west bound exit/entrance ramps. A third light may be added at SR



528 / Watertower Drive / RW Parkway. These should be programmed for peak volume times. The Village should begin dialogue with the Ohio Department of Transportation for this future improvement.

EDWARDS STREET EXTENSION (Long term)

Long term plans may warrant the extension of Edwards Street to Dayton Road. Not a priority in the near term, this improvement would open up the interior of the Village to multiple development scenarios. Consideration should be given to Residential Conservation Design to protect the wetlands and woodlots in this area.



NEW INTERSTATE 90 EXIT

Some members of the Comprehensive Plan Committee were enthusiastic about an additional exit on Interstate 90 in Madison Township, either in the vicinity of Wood Road/River Road, at Bates Road, or at County Line Road. Justification of a second exit ranged from promotion of economic development to homeland security.

As with a grade-separated railroad crossing, there are many physical, geometric, economic and political barriers that would make such a project difficult to build.

• Extension of Townline Road south to I-90 would require an multi-million dollar high level bridge crossing the Grand River gorge. The new road would intrude onto the River Road Metropark property. The terrain of surrounding land is not amenable to industrial or commercial development. The exit location would conflict with the Leroy Township comprehensive plan, which recommends limited development and accessibility at the eastern end of the township.

Federal Highway Administration (FWHA) policy for additional interchanges onto Interstate Highways

It is in the national interest to maintain the Interstate System to provide the highest level of service in terms of safety and mobility. Adequate control of access is critical to providing such service. Therefore, new or revised access points to the existing Interstate System should meet the following requirements:

- 1. The existing interchanges and/or local roads and streets in the corridor can neither provide the necessary access nor be improved to satisfactorily accommodate the design-year traffic demands while at the same time providing the access intended by the proposal.
- 2. All reasonable alternatives for design options, location and transportation system management type improvements (such as ramp metering, mass transit, and HOV facilities) have been assessed and provided for if currently justified, or provisions are included for accommodating such facilities if a future need is identified.
- 3. The proposed access point does not have a significant adverse impact on the safety and operation of the Interstate facility based on an analysis of current and future traffic. The operational analysis for existing conditions shall, particularly in urbanized areas, include an analysis of sections of Interstate to and including at least the first adjacent existing or proposed interchange on either side. Crossroads and other roads and streets shall be included in the analysis to the extent necessary to assure their ability to collect and distribute traffic to and from the interchange with new or revised access points.
- 4. The proposed access connects to a public road only and will provide for all traffic movements. Less than "full interchanges" for special purpose access for transit vehicles, for HOV's, or into park and ride lots may be considered on a case-by-case basis. The proposed access will be designed to meet or exceed current standards for Federal-aid projects on the Interstate System.
- 5. The proposal considers and is consistent with local and regional land use and transportation plans. Prior to final approval, all requests for new or revised access must be consistent with the metropolitan and/or statewide transportation plan, as appropriate, the applicable provisions of 23 CFR part 450 and the transportation conformity requirements of 40 CFR parts 51 and 93.
- 6. In areas where the potential exists for future multiple interchange additions, all requests for new or revised access are supported by a comprehensive Interstate network study with recommendations that address all proposed and desired access within the context of a long-term plan.
- 7. The request for a new or revised access generated by new or expanded development demonstrates appropriate coordination between the development and related or otherwise required transportation system improvements.
- 8. The request for new or revised access contains information relative to the planning requirements and the status of the environmental processing of the proposal.

- Extension of Wood Road south to I-90, as with Townline Road, would require an expensive high level bridge across the Grand River. The road would intrude onto the River Road Metropark and Camp Stony Glen property. River Road is very close to I-90 where it meets Wood Road, and building an exit from and entrance to the westbound lanes of I-90 would require a massive realignment of River Road to the north.
- An exit at River Road would be nearly impossible to build, because of the angle at which it crosses I-90, and the nearby presence of the intersection with Dayton Road.
- An exit at Bates Road would be less than one mile from the existing exit at River Street (OH 528); closer than even the recommended minimum spacing for Interstate exits in urban areas.
- County Line Road is a dirt road south of South Ridge Road.

All the suggested locations, except Townline Road, are less than three miles from the current exit at River Street. Interstate Highway standards recommend minimum spacing of three miles between exits in rural areas.

Traffic generated by additional exits would be disruptive to residents along affected roads, and exacerbate urban sprawl in the region by opening land located away from utility lines, schools, and retail centers, much of it with established agricultural uses, to development. Much of that development would likely be frontage subdivision.

A second exit may also "dilute" the already limited market for commercial and industrial sites near the current River Road/OH 528 exit. There is also a surplus of commercial and industrial zoned land in Madison Village and Madison Township. The addition of more commercial and industrial zoned land could further depress land values, and harm efforts to develop the area near Water Tower Drive and the existing Interstate 90 exit.

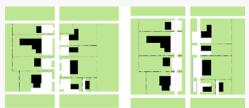
The limited benefits provided by a second exit are far outweighed by its economic, social and environmental costs. This plan does not recommend any additional exits on I-90 in Madison Township or Madison Village.

What is access management?

Access management is a group of strategies, tools, and techniques that work to improve the safety and efficiency of roads – not by adding lanes but by controlling where vehicles can enter, leave and cross a road.

For example, consider a commercial strip that has developed over several decades along both sides of a four lane road. Without access management, the businesses with frontage on the road would all have individual curb cuts for their driveways that let drivers get into their often small parking lot. People trying to pull off the street would slow traffic behind them, and if turning left across the oncoming traffic lane, a number of risks arise.

- To cars in the oncoming lane, or cars slowing behind the turning vehicle, who risk accidents.
- To pedestrians trying to walk along the road, at risk when they cross a driveway.
- To bicyclists riding along the shoulder, facing risk as traffic behind the turning vehicle try to use the shoulder to get around the bottleneck.



(Access Management Guidebook, Humstone and Campoli, 1996)

Multiply this by 100 businesses, and there can be a real mess. Safety would be highly compromised, and the resulting traffic snarls frustrate shoppers and commuters alike. The many driveways also reduce the space that could be devoted to landscaping, making the area less attractive. Everyone loses: businesses, residents, and travelers.

This is the situation today along US 20 in eastern Lake County.

Access management is one solution to this problem. It helps residential developers build safer neighborhoods. It offers ways to group businesses, their customer access, and their parking lots together, reducing costs and maximizing efficiency. It facilitates left turning without slowing traffic or compromising safety. It makes roads safer and more inviting for drivers, pedestrians, and cyclists. It also increases traffic capacity, without having to spend millions to add lanes or build frontage roads.

DOWNTOWN AREA

The downtown area must effectively handle the traffic flow of two state routes while providing adequate parking opportunities for business patrons. Lack of convenient, accessible parking and the congestion caused by vehicles waiting to head north on Lake Street (SR 528) off Main Street (SR84) are two issues in the area.



There are eighty-four on street parking spaces in the downtown area (Main Street, between Lake St. and Eagle St. and Park Street) and a public parking lot in the rear of the main block of buildings with access of Lake Street. Increased directional signage should encourage visitors to this area if on-street spots are full. The ability to link the separated parking lot and downtown through distinct brick pavers, plantings or low impact lighting is desirable.

If available, the Village should consider the acquisition of the parcels at the southwest corner of Main Street / Lake Street for a more visible public parking area. This could accommodate approximately 20 vehicles.

The Village should consider the removal parking spaces on the south side of Main Street (near the Lake Street intersection) to provide additional stacking area for vehicles turning left (north bound) onto Lake Street while allowing through traffic to continue east. The loss of parking could be offset by a new public lot as mentioned above.

While other potentially more expensive solutions exist, these ideas present more feasible short term parking and traffic pattern options.

5.5 Access management

Businesses along Lake Street/OH 528 usually have unfettered access to the road. Businesses often have two or more driveways or curb cuts from the street to provide access. Many businesses along the road have continuous curb cuts, where the pavement of a business parking lot will meet the road surface along the entire frontage, with no landscape buffer or physical barrier separating them. This causes the street, parking lot, and sidewalk to bleed together as a mass of pavement. Continuous curb cuts create a very unsafe pedestrian environment, because vehicles can cross a pedestrian path anywhere. Continuous curb cuts make it difficult for a driver to find the correct entrance to a business. They also increase stormwater runoff, eliminate any visual buffer between the street and a building, and present an unkempt, unappealing and makeshift appearance of a commercial district. Many access problems are the result of poor subdivision, zoning and site planning requirements and practices in the past.

Houses on lots fronting on long collector roads usually have their own driveways. The minimum road frontage for a residential lot in the village is 100'. If lots were created at the maximum permitted density and minimum permitted frontage, driveways could, in theory, be more common along the village's collector roads than in more built-up suburban areas. The proliferation of driveways is a result of the land division pattern in the village; narrow lots fronting on collector roads are split off from larger lots. Over time, this development pattern results in a row of houses (and driveways) along a road, behind which is the large undeveloped portion of the original lot. As in commercial areas, the large amount of driveways accessing collector roads can be a safety issue, to both drivers and pedestrians.

Madison Village now has no access management policy or requirements.

Access management is a process for providing access to land development, while preserving traffic flow on surrounding roadways in terms of safety, capacity, and speed. This is done by managing location, design and operation of driveways, median openings, and street connections along a road. It also includes use of dedicated turn lanes or bypass lanes, to keep turning vehicles from blocking through traffic.

Access management is used to improve vehicular and pedestrian safety, maintain road capacity and reduce congestion, and enhance community character and aesthetics.

By maintaining the capacity and level of service of the road, access management protects the substantial public investment in transportation, and reduces the need for expensive improvements. Studies conducted in Florida and Colorado suggest that poor spacing, design, and location of driveways lower average travel speed, and improvements in access management can increase roadway capacity. Research has also shown that access management helps reduce the rate and severity of traffic accidents. Good definition and spacing of driveways also improves pedestrian and bicycle safety, by reducing the potential for conflicts with turning vehicles.

From a land development perspective, access management requirements further the orderly layout and use of land and help discourage poor subdivision and site design. The quality of site access is also important to the success of a development project. The Urban Land Institute Shopping Center Development Handbook warns that poorly designed entrances and exits not only present a traffic hazard, but also cause congestion that can create a poor image of the center. Reducing the number and frequency of driveways and median openings also improves the appearance of major corridors. More land is freed for landscaping, the visual dominance of paved areas is reduced, and scenic or environmental features can be protected. Access management requires coordination of land use and transportation objectives. The village can address the interdependence of land division and access and add access management regulations in its zoning regulations. Access management techniques usually include the following:



Poor access management: continuous curb cut

- Regulation of driveway spacing, corner clearance, and sight distance.
- Increased minimum lot frontage and setback requirements along thoroughfares.
- Restriction on the number of driveways for existing lots, and consolidating access wherever possible.
- Requirements for driveway design elements and conditions requiring their use.
- Requiring internal connections, unified circulation and

parking plans between adjacent properties.

- Treating properties under the same ownership and those developed as a unified project as one property for the purpose of access control.
- Using frontage and rearage roads to serve as a common access drive for properties along a corridor.
- Restriction of flag lots and regulate private roads and access easements.
- Minimizing commercial strip zoning and promote mixed use and flexible zoning.
- Minimizing casual lot splits to prevent access and right-of-way problems.

DRIVEWAY LOCATION AND DESIGN

Driveway location and design affects the ability of a driver to safely and easily enter and exit a site. If not properly placed, exiting vehicles may be unable to see oncoming vehicles and motorists. Redundant driveways along village roads add points of conflict that make traffic patterns unpredictable, increase the risk of accidents, and contribute to traffic delays. If the turning radius and width are very wide, fast maneuvers on and off the site pose safety hazards for pedestrians, bicycles, and vehicles. Without an adequate throat or stacking lane, vehicles may block traffic while waiting to enter a site, or block parking rows while waiting to leave.

Driveway location and design can be regulated by amending parking lot design standards in the zoning code.

DRIVEWAY NUMBER AND SPACING

There are too many driveways that access Lake Street/OH 528 and other village roads, and they are too close together. Decreasing the number of driveways and increasing their spacing can increase safety and traffic flow.

Many businesses along Lake Street/OH 528, Main Street/OH 84 and River Street/OH 528 have two or more driveways. Business owners sometimes believe multiple driveways offer easier, more convenient access to potential customers. However, they increase the number of conflict points along the road, and reduce the spacing between driveways. Redundant driveways increase points where traffic can back up and accidents can occur.

Reasonable spacing between driveways is also important to the safety and capacity of a road, and the appearance of a corridor. Managing driveway spacing is essential on roads intended for higher speeds, such as North Ridge Road. At higher speeds drivers have less time and distance to react to unexpected situations. In most access management regulations, the minimum distance between driveways increases, based on the classification, design speed, and traffic volume of the road.

Driveway number and spacing for commercial should be regulated by the zoning code parking area standards. Required shared access, discussed later in this section, can also help fix problems with closely spaced and redundant driveways.

Encouraging common driveways for residential uses can reduce the number of access points on collector roads and arterials. It can also protect the semi-rural character of developing areas by making development further from a main road possible, thus reducing visual impact on the roadscape. This also has the effect of making building sites more private. Lots can be platted with more flexibly, and "bowling alley" frontage lots can be avoided, resulting in larger side yards and increased spacing between houses.

A common drive can either be permanent access easements or tracts dedicated for use as private roads. Ohio state law gives developers the right to build private streets. State law does not prohibit access easements. Covenants address



maintenance of shared driveways; grading, plowing, patching and so on, along with fees.

CORNER CLEARANCE

Corner clearance is the distance from an intersection to the nearest driveway. Corner clearance standards, and restrictions on driveways in acceleration, deceleration and right turn lanes, preserve good traffic operations at intersections, and the safety and convenience of access to corner properties. Having a larger minimum lot size requirement for corner lots will protect the development potential and market value

of corner properties. It will also help assure that these properties do not experience access problems as traffic volumes grow.

JOINT AND CROSS ACCESS

Outside of the village center, few businesses have shared or cross-access driveways. Their use can reduce the number of driveways accessing the road, and also cut the amount of short vehicle trips on the road.

Joint and cross access involves connecting neighboring properties, and consolidating driveways serving more than one property. This allows vehicles to circulate between adjacent businesses without having to re-enter the road. Joint access is also used to connect major developments, reduce the number of driveways, and increase driveway spacing where highway frontage has been subdivided into small lots. This allows more intensive development of a corridor, while maintaining traffic operations and safe and convenient access to businesses.

In many communities, larger parcels are often developed as a unified site, with joint and cross access planned from the start, even if the site will be subdivided into several commercial lots. In Madison Village, land along collector arterial roads is often subdivided and developed incrementally over a long period, with no unified plan for a site. Each of the resulting lots is developed individually, with no coordination of access.

One way that joint access can be implemented is by prohibiting direct access to an arterial or collector road from outparcels and lots that are carved from larger lots. Instead, the owner of the original parcel must provide access rights from the old lot to the new. If the original host lot is not immediately developed, the developer of the newer lot may be allowed a temporary driveway, which would be closed when the original lot is developed. The easement or access agreement is recorded with the property records, along with a joint maintenance agreement, and an agreement to close the temporary driveway when the joint access system is complete. As an alternative, property owners can also be required to create a binding joint access and cross easement plan before subdividing their property.

For new development on new and existing lots, access rights and stub-out drive aisles to adjacent parcels would be required by zoning resolution parking requirements, along with the appropriate access easements and/or agreements. For lots that are developed, creating stub-out driveways and recording access easements and/or agreements would be required if the business or use on the property changed, or as a condition of a building permit for major expansion or renovation.

Because access is shared, it will also be easier to share parking areas. The zoning code should be amended to allow reduced a lower number of parking spaces for a use if access is shared.

MEDIANS

There are no medians along any roads in the village. Medians can control the location and reduce the number of left-hand turn points, and eliminate congestion caused by stopped cars turning from the passing lane.

Raised or grassy medians in the center of a road separate opposing lanes of traffic and restrict turning and crossing movements. Studies from around the nation show

that roads with raised medians are safer than those with undivided thoroughfares or center two-way left turn lanes, where traffic is far less predictable, and left hand turns can create accident- and congestion-prone conflict points.

As with driveways, the spacing and design of median openings is important to the safe and efficient operation of the road. Safety benefits are reduced where median openings have inadequate storage – the length of the stacking area for cars waiting to turn – or are too close together, increasing the number of conflict points.

Medians also provide a refuge for pedestrians and bicyclists crossing a road, and can provide visual appeal and relief if they are landscaped. Considering the importance of the nursery industry in the village, landscaped medians can help reinforce a unique "sense of place" by showcasing the products of area nurseries. Some communities have "adopt-a-median" programs, where a small sponsorship sign is displayed to identify a business or group that paid to landscape and maintain a stretch of median.

POSSIBLE BUSINESS CONCERNS

Businesspeople may object to access management because they believe it makes access less convenient for impulse customers and delivery vehicles. However, it has no effect on the demand for products and services they offer. Studies show access management generally does not harm local businesses.

Local businesses that depend upon drive-by traffic may raise concerns that their patronage will be hurt by medians and driveway limitations. Others may claim they will be affected because customers and delivery vehicles will find it less convenient turning into a dedicated driveway, rather than just pulling off the road into a parking lot with a continuous curb cut.

Several studies were conducted in the 1990s to find the potential economic effects of access management. Most studies have focused on business owner perceptions of impacts, before and after case examples, or generalized comparisons of business activity across corridors.

The Texas Department of Transportation conducted a study of the economic impacts of left-turn restrictions in the mid-1990s. Key findings included the following:

- Perceptions of business owners before a median was installed were more pessimistic than what usually happened.
- Business owners reported no change in pass-by traffic after median installations.
- Most business types (including specialty retail, fast-food restaurants and sit-down restaurants) reported increases in numbers of customers per day and gross sales, except for gas stations and auto repair shops, which reported decreases in the numbers of customers per day and gross sales.
- Most adverse economic impacts were realized during the construction phase of the median installations.
- Employment within the corridors experienced upward trends overall, with some exceptions during construction phases.
- When asked what factors were important to attracting customers, business
 owners generally ranked "accessibility to store" lower than customer service,
 product quality and product price, and ahead of store hours and distance to
 travel.

- About 94% of business owners reported that their regular customers were at least as likely or more likely to continue patronizing their business after the median installation.
- Along corridors where property values were studied, the vast majority of land values stayed the same or increased, with very few exceptions.

lowa State University conducted a statewide study of the effects of access management on business vitality in 1996. Results showed that:

- Corridors with completed access management projects performed better in terms of retail sales than the surrounding communities. Business failure rates along access managed corridors were at or below the statewide average for lowa. Although this suggests that access management projects generally did not have an adverse effect on the majority of businesses, some businesses may have been negatively impacted.
- 80% of businesses surveyed along access managed corridors reported sales at least as high after the project was in place. Relatively few businesses reported sales declines associated with the access management project, although these business owners felt that they were hurt by the project. The firms perceiving negative impacts were a mixture of business types.
- Similarly, about 80% of businesses reported no customer complaints about access to their businesses after project completion. Those businesses that tended to report most complaints were highly oriented toward automobile traffic.
- In all cases, 90% to 100% of motorists surveyed had a favorable opinion of improvements made to roadways that involve access management. The vast majority of motorists thought that the improved roadways were safer and that traffic flow had improved.

Although several studies assessed the potential economic damage from access management, none have examined the potential long-term economic benefits.

Poorly designed access not only hurts the character and efficiency of a corridor, but also its economic vitality over time. Property values that have increased rapidly during commercial development tend to decline after the area is built out, if the character and efficiency of the corridor is hurt in the process. The result is a pattern of disinvestment as successful businesses choose other, higher quality locations. This pattern is seen throughout the region, including in Vine Street in Eastlake and Willowick, and Mentor Avenue in Wickliffe and Painesville Township. (Studies compiled in Economic Impacts of Access Management, Kristine M. Williams, AICP, Center for Urban Transportation Research, University of South Florida, 2000.)

5.6 Road design

Complete streets are those that provide for all roadway users, including bicyclists, pedestrians, transit riders, and motorists, to the extent appropriate to the function and context of the street. Throughout the United States, there is increasing recognition that increasing travel speeds and reducing congestion should not be the only goal of a roadway. A street should be seen as an important determinant of sense of place and neighborhood character, and extensions of residents' living environment, as much as a channel for moving traffic.

BICYCLE AND PEDESTRIAN ACCOMODATION

Although it may not be a priority among residents, it is poor planning practice to ignore the needs of pedestrians and cyclists in a comprehensive plan and the overall transportation system.

BLOCK LENGTH

The long, straight rural roads of Madison Village are being transformed into suburban streets. Various street design guidelines recommend a maximum residential block length ranging from 500 feet to 750 feet. However, existing arterial roads are increasingly functioning as long residential blocks. A study conducted by the City of San Antonio, Texas found that streets exceeding 600 feet in uninterrupted block length typically had 85th percentile speeds (the speed separating the slower 85% from the fastest 15%) that were higher than the posted speed limit.

The advantages of short blocks are many; they discourage speeding, provide more intersections where vehicles must slow down and possibly stop, provide more points where pedestrians can cross the street, and allow drivers to choose among different routes and register a sense of progress on their journey

The plan recommends a 600 foot maximum block length for residential streets, with exceptions for streets serving conservation development projects that provide an alternative to frontage development.

CONNECTIVITY

The current street standards encourage subdivisions with cul-de-sacs and a looping street pattern. The street network that results may provide difficult or no connectivity between residential areas in the village.

Greater connectivity promotes mobility and reduces congestion by providing options for people to enter and exit their subdivision. Traffic concentration on a small number of streets, a problem with a hierarchical street network, is less of an issue with a more interconnected street grid. Increasing the number of possible routes to a destination helps public safety services save time reaching a scene of an emergency. Resident survey results show that respondents are very receptive to New Urbanism-style development, a trademark of which is an interconnected street pattern. It also promotes a greater sense of community; residential areas are more integrated into the larger village, rather than isolated as pods.

5.7 Public transportation

Laketran, the public transit agency serving Lake County, operates a Dial-a-Ride service. The service offers door-to-door, assisted transportation for all Lake County residents, including those in Madison Village. Dial-a-Ride picks up users at their homes, and drops them off at work, medical appointments, or any other destination in Lake County. It also provides transportation to medical appointments at Euclid Hospital, University Hospital's Euclid Health Center, Euclid Medical Plaza, Richmond Medical Center, University Hospitals and Cleveland Clinic in Cuyahoga County.

Dial-a-Ride is not intended for regular commuters, but rather for senior citizens and the physically disabled. It can be used as temporary transportation for those whose vehicles have broken down.

Laketran route 4 (Painesville-Madison) operates on North Ridge Road/US 20 through Madison Township, terminating in North Madison; the route does not enter the Village. Service is sparse, with three westbound buses and two eastbound buses on weekdays only. Route 11 provides commuter service to Lakeland Community College and downtown Cleveland from a large, lushly



landscaped park-and-ride facility on Water Tower Drive. There are two buses in each direction on weekdays, and no weekend service. The Laketran Transit Plan shows no plans to extend fixed route bus lines into the village.

Village officials should work with Laketran officials to examine the feasibility of a Village – Township circulator route with an occasional run to Painesville City. Growing amenities such as the US 20 commercial corridor, YMCA, senior center, historic village center and lakefront maybe eventually warrant increased transit service.

The land use element of this plan recommends higher density residential development in the village, especially closer to the Laketran terminal, making increased transit service viable.

5.8 Goals and policies

Each primary paragraph (in bold type) is a statement of a goal. The subparagraphs are policies for implementing the goal. Many goals and policies related to housing can be found in the Land Use element and throughout the plan.

- TR-1 The transportation network should reflect the desired character of the area where it is built.
- TR-1-p1 Continue gradual improvement of roads in the village. Improvements to collector and local roads should be performed to benefit area residents, not to encourage through traffic from outside the community, or promote land development.
- TR-1-p2 Connect the eastern end of RW Parkway to Bates Road.
- TR-1-p3 Consider the extension of Water Tower Drive.
- TR-1-p4 Prepare potential road connection strategies with RW Parkway and north south roads that will eventually tie in to the transportation network.
- TR-1-P5 Require developers and subdividers to dedicate right-of-way and construct portions of proposed collector roads that cross or touch their property.
- TR-1-p6 Maintain low design speeds along collector roads when they are reconstructed, to reduce effects of increased traffic. Control speed through non-vertical traffic calming techniques, such as increased tree cover over a road, roundabouts, curbline projection, and varying the path of the travel surface in the right-of-way
- TR-1-p7 Consider roads in new development to follow principles of traditional neighborhood design, with a grid of streets that provides a high level of connectivity, rather than looping streets, permanent cul-de-sacs, "pods" and other elements that make interconnectivity difficult.
- TR-1-p8 If Lake Street/OH 528 is upgraded, this plan recommends using a landscaped median instead of a continuous center turn lane to divide opposing lanes of traffic.
- TR-1-p9 Consider setback increases along Lake Street to accommodate a wider right-of-way, and traffic calming along River Street to alleviate any increased traffic by road improvements elsewhere.

TR-2 An access management policy will be implemented.

TR-2-p1 Add access management requirements for commercial and industrial land uses to the zoning code. Requirements should include prohibition of continuous curb cuts, spacing of curb cuts along a road and from intersections, limiting number of curb cuts on a road based on lot width and use intensity, limiting driveway width, reducing conflicts between pedestrians and access drives, required shared driveways where feasible,

requiring connections between parking lots on adjacent properties,
internal access to outparcels, and eventual retrofitting and elimination of
continuous and nonconforming curb cuts.
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- TR-2-p2 Permit shared access driveways and private roads for residential development and uses. Access management requirements for residential areas should also control spacing of driveways along a road, and dimensional, geometry and maintenance standards for private roads.
- TR-2-p3 Consider increasing the minimum lot frontage for residential lots fronting on arterial and collector streets.
- TR-2-p4 Work with the Lake County Engineer and Planning Commission in creating and implementing an access management policy.
- TR-3 Transportation networks will accommodate pedestrians and non-motorized transportation.
- TR-3-p1 Require sidewalks and wide tree lawns on all new roads in the village.
- TR-3-p2 Accommodate bicycles by including clearly marked lanes on new and reconstructed collector and arterial roads.
- TR-3-p3 Respect the right of pedestrians and bicyclists to safely share roads with motor vehicles.
- TR-4 Public transportation will remain an option for township residents.
- TR-4-p1 Work with Laketran to ensure Dial-A-Ride and commuter bus service continues to provide quality service in the village. Promote Dial-A-Ride as a transportation option for senior citizens and the mobility-impaired.
- TR-4-p2 Work with Laketran to research a Madison area circulator.

6 Housing

6.1 Introduction

Even as the population of the Cleveland area has leveled off, the number of people living in Madison Village has increased gradually since World War II. As the popularity of exurban living continues to grow, so will the number of new residents in the village. With growth comes certain community needs, including housing.

As of 2000, the US Census Bureau estimates the population of Madison Village at 2,921 residents, living in 1,165 housing units. At the end of 2005, there is an estimated 1,302 housing units in the village. Three-quarters of all residences in the village are single-family houses, typically sited on lots near the village center, or in newer suburban-style subdivisions removed from the village center.

To maintain a community with a variety of age groups, it is necessary to ensure adequate and affordable housing opportunities for all residents.

The housing element discusses the existing conditions and the factors that affect the housing market in the village, and establishes policy to guide development, maintenance, and redevelopment of housing resources.

The housing element is closely tied to other elements of the comprehensive plan. All of the elements touch on factors contributing to the quality of life of in the village. More in-depth analysis and discussion of land use, transportation, public service delivery, and recreational needs can be found in other plan elements.

6.2 1963 Comprehensive Plan

The 1963 Madison Village Comprehensive Plan did not include a housing element, and included no goals or policies related specifically to housing, except for the objective of "promotion of better housing and neighborhood standards." Housing was briefly addressed in a section regarding residential land use and zoning. About existing housing, the plan said "There is little demand for a large amount of multiplefamily housing, either new or converted; however, the demand is expected to increase as the community grows. Conversion of existing buildings and particularly the fine old homes must be handled with judicious care".

The plan was very optimistic in its outlook for the village, projecting a population of 8,500 in the village by 1985, and stated "the entire area including the village within the scope of the territory mapped could easily accommodate 53,750 people."

6.3 Housing issues

SLOW REGIONAL POPULATION GROWTH

Compared to previous generations, Cleveland area residents are now spread thinner among far more housing units, on lots that are much larger, located further afield from the region's core. Many communities in Lake County stake their growth on

attracting married couples with children, but such families are a shrinking percentage of all households.

While the popular perception that eastern Lake County is growing rapidly is not true, the pace of housing give the impression that the post-WWII population boom continues to this day. While Madison Village is growing, many other communities in the region are facing a stagnant or declining population, even those where vacant land is plentiful and housing construction continues.

SENIOR CITIZENS

The fastest growing segment of the population is senior citizens. The number of Lake County residents that are 65 or older is expected to rise from 29,900 (13.6% of the county population) in 2000 to 35,600 (15.8%) in 2015. There will increased demand for senior-friendly housing – maintenance-free patio homes, townhouses, condominiums in multi-family buildings, and independent and assisted living centers – in convenient locations that reduces the need to drive for day-to-day needs. Townhouses and patio homes that appeal to seniors are available in Madison Village, but the services many senior citizens rely on are a long drive away. As seniors age, they may be less able to maintain large houses on large lots.

HISTORIC PRESERVATION AND CHARACTER

The "quaint" and historic character of the village has great appeal among many current and prospective residents, contributing to the sense of place that many surrounding communities lack. 21.6% of all housing in the village was built before 1940, compared to only 10% for the county as a whole.

Madison's historic architecture represents an unusually high level of quality for a village its size. The historic architecture of Madison was recognized nearly thirty years ago when the Madison Multiple Resource Area was listed on the National Register of Historic

Places. The Multiple Resource Area includes numerous churches, homes and public buildings and a historic district surrounding the public square. Today, a five member Design Review Board oversees proposed changes within the Village of Madison Historic Preservation District. Newer housing in outlying subdivisions, though, often lacks the charm, character and detail to attention that distinguishes housing in the village center. The addition of more "spec houses" to the housing stock may dilute the historic character and sense of place that the village now enjoys and values.

6.4 Housing inventory

Madison Village had 1,165 housing units in 2000, according to Census data. Between 1970 and 2000, 657 new units were added in the village; an increase of 156%. The population of the village rose by 116% during the same time. Declining household and family size accounts for the difference in population and housing growth rates; the same number of people occupy more space. (Table 6.1)

The low percentage of increase in new housing units during the 1980s corresponds with a recession that severely affected Northeast Ohio. Growth in housing units resumed in the 1990s and continues to this day.

Table 6.1 Housing ur Madison Villag	nits 1970-200 e)5	
Year	Housing units	Increase from previous decade	∆% from previous decade
1970	508	n/a	n/a
1980	777	269	53.0%
1990	896	119	15.3%
2000	1,165	269	30.0%
2005	1,302	137	11.8%
Includes a very (US Census Bur	small number of eau)	f seasonal housi	ng units.

HOUSING STOCK AGE

The median year of construction for a home in Madison Village is 1972. Owner-occupied units tend to be newer than rental units. Despite the amount of historic housing in the village, the median year of construction is higher than for surrounding communities and the County in general. (Table 6.2)

Table 6.2 Housing age: Madison Village; o			
	Media	an year housing	g built
Community	Owner occupied units	Rental units	All units
Madison Village	1973	1970	1972
Madison Township	1969	1964	1969
Perry Township	1970	1967	1970
Perry Village	1968	1944	1964
Geneva Township	1957	1959	1958
Lake County	1971	1969	1970
(US Census Bureau	1)		

Madison Village and Perry Village both have a high percentage of housing stock built before World War II; 20.3% and 25.4% respectively, much higher than surrounding communities. (Table 6.3)

	прип	טוד נט	otner	comi	munit	ies										
Community	939	1940- 1949			1950- 1959		1960- 1969		1970- 1979		1980- 1989		1990- 1999		2000- 2005	
Community	Units	%	Unit s	%	Unit s	%	Unit s	%	Unit s	%	Unit s	%	Unit s	%	Unit s	%
Madison Village	254	20.3%	17	1.4%	83	6.6%	135	10.8%	255	20.4%	98	7.8%	265	21.2%	145	11.6%
Madison Township	763	8.1%	1,526	16.2%	3,052	32.5%	851	9.0%	1,342	14.3%	526	5.6%	874	9.3%	470	5.0%
Perry Township	254	7.6%	508	15.1%	1,016	30.2%	407	12.1%	350	10.4%	161	4.8%	507	15.1%	159	4.7%
Perry Village	137	23.8%	25	4.3%	39	6.8%	31	5.4%	32	5.6%	40	7.0%	122	21.2%	149	25.9%
Geneva Township*	1,935	35.6%	589	10.8%	959	17.7%	581	10.7%	819	15.1%	460	8.5%	629	11.6%	n/a	n/a
Lake County	0.030	9 9%	8 528	8 5%	23 172	23.0%	15 296	15 2%	16 837	16.7%	10.050	10.0%	11 843	11 8%	5.082	5.0%

HOUSING TYPE

Compared to surrounding communities and the county, the housing inventory of Madison Village does not contain a disproportionately large number of any single type of housing. (Table 6.4)

Community	Total		ınit		ınit	_	2	3.	•	_	.9 .:tc		-19)+ .itc	Mo		Boat	
Community	housing units	Units	_	Units	ched %	<i>un</i> Units		<i>un</i> Units		Units	its %	Units	its %	Units	its %	ho. Units	me %	van, Units	_
Madison Village	1,171												0.0%		1.5%		0.3%		0.0%
Madison Township	6,213	4,777	76.9%	97	1.6%	66	1.1%	12 2	2.0%	57	0.9%	48	0.8%	95	1.5%	95 1	15.3%	0	0.0%
Perry Township	6,114	4,332	70.9%	78 5	12.8%	10 7	1.8%	11 2	1.8%	26 2	4.3%	19 7	3.2%	58	0.9%	26 1	4.3%	0	0.0%
Perry Village	438	37 1	84.7%	36	8.2%	12	2.7%	6	1.4%	13	3.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Geneva Township	5,432	3,555	65.4%	68	1.3%	30 1	5.5%	32 3	5.9%	23 0	4.2%	14 1	2.6%	47	0.9%	72 9	13.4%	21	0.4%
Lake County	93,487	68.094	72.8%	5.849	6.3%	1,573	1.7%	2,194	2.3%	3.875	4.1%	3,575	3.8%	5,989	6.4%	2,329	2.5%	9	<0.1%

The easternmost communities in Lake County have the bulk of its mobile homes. However, only three of them are in Madison Village. Excepting Perry Village, all surrounding communities have a much higher percentage of mobile homes compared to Lake County as a whole. (Table 6.5)

Table 6.5 Mobile homes 2000 Madison Village; comparison to other communities											
Community	Site-bui	ilt units	Mobile	homes							
Community	Units	%	Units	%							
Madson Village	1,168	99.7%	3	0.3%							
Madison Township	5,262	84.7%	951	15.3%							
Perry Township	2,028	92.6%	161	7.4%							
Perry Village	438	100.0%	0	0.0%							
Geneva Township*	4,682	86.2%	729	13.4%							
Lake County	91,149	97.5%	2,329	2.5%							
* Does not include be (US Census Bureau)	oats, RVs, a	ind vans in	Geneva T	wp.							

HOUSING SIZE

The decennial Census does not collect data for house square footage. Instead, the Census counts the number of rooms (living rooms, family rooms, bedrooms, kitchens, dining rooms, but not "three season rooms", bathrooms or closets) in a house.

The average house in Madison Village (6.3 rooms) is larger than those in the township and the county as a whole (6.1 rooms), but smaller than Perry Village and Perry Township In 2000, only 30% of village housing units had five or fewer rooms, compared to 38% of the county as a whole. (Table 6.6)

Table 6.6 Rooms per unit Madison Village; cor			other (comm	unitie	5									
Community	Community 1-3 rooms 4 rooms 5 rooms 6 rooms 7 rooms 8 rooms 9+ rooms Me												Med		
Community	Units	%	Units	%	Units	%	Units	%	Units	%	Units	%	Units	%	room
Madison Village	87	7.4%	102	8.7%	158	13.5%	330	28.2%	208	17.8%	157	13.4%	129	11.0%	6.3
Madison Township	338	5.4%	753	12.1%	1,480	23.8%	1,314	21.1%	1,043	16.8%	624	10.0%	661	10.6%	6.1
Perry Township	60	2.0%	238	8.1%	437	14.8%	615	20.9%	578	19.6%	576	19.6%	439	14.9%	6.8
Perry Village	17	3.9%	31	7.1%	72	16.4%	86	19.6%	101	23.1%	70	16.0%	61	13.9%	6.7
Geneva Township	737	13.6%	980	18.0%	1,071	19.7%	1,181	21.7%	709	13.0%	455	8.4%	299	5.5%	5.4
Lake County	6,857	7.3%	10,660	11.4%	18,369	19.6%	21,000	22.5%	15,876	17.0%	11,430	12.2%	9,295	9.9%	6.1
For each unit, rooms inc suitable for year-round u halls or foyers, half-room	use, and	d lodge	ers' rooi	ns. Exc	luded	are stri _l	or pu	llman l	kitchens	s, bath	rooms,	open p	orches	, balco	nies,
divided room is a separa or cabinets. (US Census Bureau)	•	,	•								•				,

The median number of bedrooms for a house in Madison Village is 3.1; higher than its neighbors (except Perry Township) and the county as a whole. 5.7% of all housing units in the village have five or more bedrooms; twice the percentage of the County as a whole. The village has a smaller percentage of units with only one or two bedrooms than units in surrounding communities and the county. (Table 6.7)

Table 6.7 Bedrooms per unit Madison Village; comparison to other communities													
Community No bedrooms 1 bedroom 2 bedrooms 3 bedrooms 4 bedrooms 5+ bedrooms Media												Median	
Community	Units	%	Units	%	Units	%	Units	%	Units	%	Units	%	BRs
Madison Village	0	0.0%	11	3.5%	48	15.2%	163	51.6%	76	24.1%	18	5.7%	3.1
Madison Township	66	1.1%	297	4.8%	1,491	24.0%	3,182	51.2%	1,010	16.3%	167	2.7%	2.8
Perry Township	0	0.0%	55	2.5%	375	17.1%	1,103	50.4%	550	25.1%	106	4.8%	3.1
Perry Village	4	0.9%	22	5.0%	66	15.1%	226	51.6%	107	24.4%	13	3.0%	3.0
Geneva Township	86	1.6%	775	14.3%	1,647	30.0%	2,147	39.5%	601	11.1%	176	3.2%	2.5
Lake County	775	0.8%	6,913	7.4%	20,708	22.2%	44,626	47.7%	17,877	19.1%	2,588	2.8%	2.9
(US Census Bureau)													

HEATING FUEL

Most housing units in Madison Village are heated with natural gas (80%) or electricity (17.5%). Only 27 houses are heated through alternative means such as wood or fuel oil. (Table 6.8)

Table 6.8 Heating fuel used 1990-2000 Madison Village											
Fuel	19	90	20	00							
ruei	Units	%	Units	%							
Utility gas	702	80.4%	886	80.0%							
Bottled, tank or LP gas	3	0.3%	4	0.4%							
Electricity	140	16.0%	194	17.5%							
Fuel oil or kerosene	14	1.6%	3	0.3%							
Coal or coke	0	0.0%	0	0.0%							
Wood	14	1.6%	4	0.4%							
Solar	0	0.0%	0	0.0%							
Other fuel	0	0.0%	16	1.4%							
No fuel	0	0.0%	0	0.0%							
(US Census Bureau)											

PLUMBING AND KITCHEN FACILITIES

170 housing units in Lake County do not have complete plumbing facilities, and 233 units do not have complete kitchen facilities. Even with the inventory of older small cottages, no housing units in the village are lacking kitchen or plumbing facilities. (Table 6.9)

Table 6.9 Kitchen a Madison Villa		umbing	facilities	2000	
Tenure	Total units	complete	% lacking complete plumbing	complete	
Owner	848	848	0.0%	0	0.0%
Renter	259	259	0.0%	0	0.0%
Total units	1107	1107	0.0%	0	0.0%
Occupied ho (US Census B		nits only.			

WATER AND SEWER

About 93% of all dwelling in Lake County are supplied with water from a public or private water utility. The rest are served by wells or another source; usually delivered by truck. About 95% of housing units in Madison Village are served by a public water system.

84% of all dwellings in the county are served by a public sewer system, with most others using a septic system or cesspool. 83% of housing units in Madison Village are connected to the municipally controlled sewer system; all others rely on septic systems for wastewater disposal. Septic systems function poorly on small village lots, where there is very little area available for leach fields (Table 6.10).

Table 6.10 Source of water and sewage dispondation Village	Source of water and sewage disposal 1990 Madison Village										
Water source	Units	%									
Public water system or private company	849	94.8%									
Individual well: drilled	20	2.2%									
Individual well: dug	27	3.0%									
Other source	0	0.0%									
Sewage disposal	Units	%									
Public sewer	742	82.8%									
Septic tank or cesspool	154	17.2%									
Other means	0	0.0%									
Statistics may or may not consider sewer syst subdivision (US Census Bureau)	ems limi	ted to a									

6.5 Home ownership and rental trends

TENURE AND OCCUPANCY

In 2000, rental housing comprises 23.4% of all housing in Madison Village. 1970, renter-occupied housing units have made up about one quarter of all units in the village. (Table 6.13)

Tenure	Table 6.13 Tenure of occupied housing units 1970-2000 Madison Village											
Year	Occupied	Owner o	occupied	Renter o	ccupied							
reur	units	Units	%	Units	%							
1970	496	372	75.0%	122	25.0%							
1980	738	746	74.0%	192	26.0%							
1990	873	599	68.6%	274	31.4%							
2000	1107	848	76.6%	259	23.4%							
	include sea us Bureau)	asonal hou	ısing (6 ur	nits).								

76% of all housing units in Madison Village are owner-occupied; comparable to the percentage for the county, but lower than that of surrounding communities except Geneva Township. (Table 6.14)

Table 6.14 Housing tenure 2000 Madison Village; comparison to other communities										
Community	Owner o	ccupied	Renter o	ccupied						
Community	Units	%	Units	%						
Madison Village	848	76.6%	259	23.4%						
Madison Township	4,766	83.7%	927	16.3%						
Perry Township	1,934	91.3%	184	8.7%						
Perry Village	358	84.0%	68	16.0%						
Geneva Township	3,188	68.2%	1,484	31.8%						
Lake County	69,502	77.5%	20,198	22.5%						
Includes seasonal hou (US Census Bureau)	using.									

For each decade since 1970, the vacancy rate for year-round housing in Madison Village ranges from about 2.5% to 5%. The vacancy rate for renter-occupied housing remains slightly higher than for owner-occupied housing. (Table 6.15).

Table 6.15 Vacancy of housing units 1970-2000 Madison Village												
Year	All units Owner occupied units Renter occupie								units			
rear	Total	Vacant	% vacant	Total	Vacant	% vacant	Total	Vacant	% vacan			
1970	508	12	2.3%	373	1	0.2%	133	11	8.3%			
1980	777	39	5.0%	558	12	2.1%	229	27	11.7%			
1990	896	23	2.6%	599	11	1.8%	274	12	4.4%			
2000	1165	58	5.0%	848	19	2.2%	259	40	15.4%			
2000 1165 38 3.0% 848 19 2.2% 259 40 15.4% Does not include seasonal housing. (US Census Bureau)												

The housing vacancy rate of Madison Village in 2000 was slightly higher (5.2%) than Perry Township, Perry Village, and the county as a whole. (Table 6.16)

Table 6.16 Housing vacancy 2000 Madison Village; comparison to other communities												
Community	Community Occupied units Vacant units											
Community	Units	%	Units	%								
Madison Village	1,107	94.8%	64	5.2%								
Madison Township	5,693	91.6%	520	8.4%								
Perry Township	2,118	96.8%	71	3.2%								
Perry Village	2,847	96.7%	96	3.3%								
Geneva Township	4,672	86.0%	760	14.0%								
Lake County	Lake County 89,700 95.9% 3,787 4.1%											
Includes seasonal hou (US Census Bureau)	ısing.											

TENURE AND HOUSING AGE

Rental housing units in Madison Village are, on average, three years older than owner occupied housing units. Although only 25% of all occupied housing units are renter occupied, about half of all units built before 1930 and 60% of all units built between 1980 and 1989 are renter occupied. (Table 6.17)

Table 6.17 Tenure by year structure built 2000 Madison Village											
Owner-occupied Renter-occupied											
Year	Units	%	Units	%							
1939 and earlier	165	19.5%	89	34.4%							
1940-1949	12	1.4%	5	1.9%							
1950-1959	64	7.5%	19	7.3%							
1960-1969	120	14.2%	15	5.8%							
1970-1979	198	23.3%	57	22.0%							
1980-1989	40	4.7%	58	22.4%							
1990-2000	249	29.3%	16	6.2%							
Total	848	n/a	259	n/a							
(US Census Bure	eau)										

HOMEOWNER EXPERIENCE

US Census statistics, as used in this element, tend to underestimate the price of real estate in a community. Respondents will often state the value of their property as the original list price from years ago, or else they are unaware of market conditions affecting the value of their property.

The median home price in Madison Village (\$151,250 in 2006) is very close to the county median (\$154,759); lower than Perry Village and Perry Township, and higher than Madison Township and Geneva Township. (Table 6.18)

Table 6.18 Median home prices 1990-2000 Madison Village; comparison to other communities												
Community 1990 2000 2000 2000 (2000+21%)												
Madison Village	\$70,000	\$125,000	78.6%	\$151,250								
Madison Township	\$64,065	\$111,500	74.0%	\$134,915								
Perry Township	\$66,198	\$144,100	117.7%	\$174,361								
Perry Village	\$68,000	\$140,400	106.5%	\$169,884								
Geneva Township	\$46,600	\$88,700	90.3%	\$107,327								
Lake County	\$73,900	\$127,900	73.1%	\$154,759								
(US Census Bureau)											

Madison Village contains relatively little high-end housing – units priced at \$200,000 or more in 2000 (5.5%) – compared to Lake County as a whole (15.3%).

Table 6.19 Value for specified owner-occupied housing units 1990-2000 Madison Village												
Madison Village Lake County												
Value of unit	19	90	20	00	19	90	20	00				
	Units	% of units	Units	% of units	Units	% of units	Units	% of units				
≤\$59,999	152	28.7%	3	0.4%	13,763	25.3%	1,198	1.9%				
\$60,000-\$99,999	312	58.9%	139	17.7%	27,964	51.4%	14,727	23.3%				
\$100,000-\$124,999	50	9.4%	251	32.0%	5,348	9.8%	14,430	22.8%				
\$125,000-\$149,999	10	1.9%	256	32.6%	3,563	6.6%	11,403	18.0%				
\$150,000-\$174,999	2	0.4%	70	8.9%	1,595	2.9%	6,887	10.9%				
\$175,000-\$199,999	2	0.4%	23	2.9%	826	1.5%	5,031	7.9%				
\$200,000-\$249,999	2	0.4%	36	4.6%	720	1.3%	4,976	7.9%				
\$250,000-\$299,999	0	0.0%	7	0.9%	279	0.5%	2,314	3.7%				
\$300,000+	0	0.0%	0	0.0%	323	0.6%	2,348	3.7%				
Total	530	n/a	785	n/a	54,381	n/a	63,314	n/a				
(US Census Bureau)												

The number of housing units in Madison Village without mortgages remained the same between 1990 and 2000, while those with mortgages rose. This is a result of the influx of new homeowners into the village. (Table 6.20)

Table 6.20 Mortgage status 1990-2000 Madison Village										
Mortgage status	1990 units	2000 units								
Total	923	785								
With a mortgage	444	625								
2nd mortgage or home equity loan, not both	n/a	183								
No 2nd mortgage and no home equity loan	n/a	438								
Without a mortgage	155	160								
(US Census Bureau)										

The rising cost of housing, exceeding the rate of inflation and wage increases, is reflected in the growing percentage of homeowners who pay more than 20% of their household income in mortgage costs; 46% in 1990 to 61% in 2000. (Table 6.21)

Table 6.21 Mortgage status by selected monthly owner costs 1990-2000 Madison Village										
1990	units	2000	units							
With	Without	With	Without							
mortgage	mortgage	mortgage	mortgage							
214	100	238	135							
75	6	138	21							
39	7	142	0							
37	9	30	0							
30%-34% (unaffordable) 37 9 30 (35%+ (unaffordable) 32 11 67										
Not computed 0 0 0 0										
	1990 With mortgage 214 75 39 37 32	1990 units With Without mortgage 214 100 75 6 39 7 37 9 32 11	1990 units 2000 With Without mortgage 214 100 238 75 6 138 39 7 142 37 9 30 32 11 67							

RENTER EXPERIENCE

As expected, median gross rent rose from \$279 in 1990 to \$599 in 2000. The data in Table 6.22 shows that rental housing is available at a wide range of prices, with no disproportionate availability of low-end or high-end units.

Table 6.22 Gross rent 1980-2000 Madison Village											
Rent	1980	1990	2000								
Median gross rent (\$)	\$279	\$423	\$599								
With cash rent	165	242	243								
<\$500	165	150	89								
\$500-\$549	0	18	3								
\$550-\$599	0	21	30								
\$600-\$649	0	9	32								
\$650-\$699	0	11	18								
\$700-\$749	0	9	12								
\$750-\$999	0	15	51								
≥\$1,000	0	2	8								
No cash rent	19	7	12								
(US Census Bureau)											

Contract rent in Madison Village is slightly lower than Perry Township, Perry Village and the county as a whole. (Table 6.23)

Table 6.23 Contract rent 2000 Madison Village; comparison to other communities																	
Community	<\$2	200	\$200	\$299	\$300-	\$499	\$500	\$749	\$750	\$999	\$1000-	\$1499	\$15	00+	No cas	h rent	Median
Community	Units	%	Units	%	Units	%	Units	%	Units	%	Units	%	Units	%	Units	%	rent
Madison Village	14	5.5%	41	16.1%	82	32.2%	98	38.4%	8	3.1%	0	0.0%	0	0.0%	12	4.7%	\$476
Madison Township	51	5.7%	111	12.4%	344	38.6%	302	33.9%	29	3.3%	0	0.0%	0	0.0%	55	6.2%	\$445
Perry Township	4	2.3%	7	4.0%	48	27.6%	71	40.8%	9	5.2%	0	0.0%	0	0.0%	35	20.1%	\$502
Perry Village	0	0.0%	7	10.8%	21	32.3%	18	27.7%	8	12.3%	3	4.6%	0	0.0%	8	12.3%	\$504
Geneva Township	108	12.2%	260	17.6%	856	57.9%	159	10.8%	12	0.8%	10	0.7%	0	4.9%	73	4.9%	\$382
Lake County	763	3.8%	737	3.7%	5,659	28.3%	10,077	50.3%	1,651	8.2%	106	0.5%	182	0.9%	849	4.2%	\$553
(US Census Bureau)																	

Renters in Madison Village tend to pay a higher percentage of their income in gross rent than in neighboring communities. However, the percentage of residents spending more than 35% of their income on rent is lower than for all surrounding communities, and the county as a whole. (Table 6.24)

Table 6.X Gross rent as a percentage of household income 1999 Madison Village; comparison to other communities														
. <15% 15%-19.9% 20%-24.9% 25%-29.9% 30%-34.9% 35%								35	%+	Not cor	mputed			
Community	HHs	%	HHs	%	HHs	%								
Madison Village	26	10.2%	26	10.2%	46	18.0%	46	18.0%	29	11.4%	48	18.8%	12	4.7%
Madison Township	149	16.7%	149	16.7%	109	12.2%	95	10.7%	40	4.5%	198	22.2%	78	8.7%
Perry Township	31	17.8%	31	17.8%	26	14.9%	8	4.6%	9	5.2%	34	19.5%	35	20.1%
Perry Village	10	15.4%	10	15.4%	6	9.2%	12	18.5%	2	3.1%	13	20.0%	8	12.3%
Geneva Township	358	24.2%	233	15.7%	227	15.3%	96	6.5%	112	7.6%	348	23.5%	104	7.0%
Lake County	3,465	17.3%	3,465	17.3%	2,958	14.8%	2,127	10.6%	1,381	6.9%	5,279	26.4%	1,073	5.4%
(US Census Bureau)														

6.6 Construction, demand and trends

RECENT CONSTRUCTION ACTIVITY

About 57% of all housing units built between 1990 and 2005 in Lake County were in the eastern end of the county: Painesville, Concord Township, and communities to the east.

For several decades, the rate of housing construction in Madison Village has exceeded the county as a while. Between 1990 and 2000, the number of housing units in the village increased by 30% (896 to 1165), a rate comparable to surrounding communities (except Madison Township), and above that of the county. From 2000 to 2005, the housing inventory rose by 11.8%, with 137 new units built in the village during that time. (Table 6.11)

Table 6.11 Housing units 1990-2005 Madison Village; comparison to other communities											
Community 1990 2000 % 2005 % 2000- 2000 units 2005											
Madison Village	896	1,165	30.0%	1,302	11.8%						
Madison Township	5,673	6,347	11.9%	6,797	7.1%						
Perry Township	1,707	2,259	32.3%	2,406	6.5%						
Perry Village	340	449	32.1%	578	28.7%						
Geneva Township	5,116	5,432	6.1%	n/a	n/a						
Lake County	84,658	94,856	12.0%	99,387	4.8%						
(US Census Bureau)											

The rate of new home construction in Madison Village has been steady between 1990 and 2005, with an average of about 23 units per year built. (Table 6.12).

Table 6.12 New housing units 1990-2005 Madison Village; comparison to other communities																		
Community	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005		Total units
Madison Village	13	19	34	21	27	26	16	23	31	16	28	25	23	23	25	21	371	1,302
Madison Township	48	33	58	50	71	59	80	93	56	28	38	193	56	76	62	45	1,046	6,797
Perry Township	19	19	39	65	88	62	77	37	62	38	26	30	19	24	32	28	665	2,406
Perry Village	2	12	19	5	14	15	8	15	6	3	7	23	33	29	23	34	248	578
Geneva Township	(not available)																	
Lake County	1,004	743	1,047	924	1,001	1,441	859	785	937	382	654	812	689	853	1,007	1,067	14,205	99,387
Annual data for new housing units does not include mobile homes. LCPC data may vary from Census data. (Lake County Planning Commission)																		

TEARDOWNS AND REDEVELOPMENT OF EXISTING HOUSING

According to housing-industry economists, the housing stock of the United States is in the process of being rebuilt, as aging houses are torn down to make room for newer homes. The average age of an American home is about 33 years, older than any previous time in U.S. history. In Madison Village, the average housing unit is about 34 years old. As the housing stock ages, construction activity will be elevated, to replace housing stock which is wearing out.

The forces driving "teardowns" in many other cities – a rapidly growing population, high land values, and the revitalization and increasing desirability of central cities and inner ring suburbs – are absent in the Cleveland area. Teardowns are taking place in some lakefront cottage communities in Willoughby and Eastlake, where older cottages are replaced with larger homes.

With a large supply of raw land in desirable locations close to the village center, it is unlikely that structurally sound houses will be replaced with larger houses. In any case, zoning should ensure older non-conforming lots remain buildable.

FUTURE DEMAND

If future development patterns and land use policy remain unchanged from today, the majority of new housing units will probably be built in the villages and unincorporated townships in eastern Lake County, with an ever-growing percentage in once-rural exurban areas. According to data from the Housing Research Policy Institute at Cleveland State University, in 1997 and 1998 81% of suburban Cleveland households that moved relocated further out from the central city. 80% of those that moved bought a more expensive house, with a median move-up price of 57%.

Average household size is likely to continue shrinking; from 2.5 people per household in the county in 2000 to 2.26 in 2010 and 2.03 in 2020. According to Ohio Department of Development and NOACA calculations, the population of Lake County is expected to peak at 234,524 residents in 2020, and drop to 232,345 residents in 2030. New housing will be driven by shrinking family sizes and a growing number of households, not raw population growth.

Outlying communities throughout the country are growing, but they are susceptible to increased energy costs – gasoline for travel and lot maintenance, and natural gas and electricity for heat – and an aging population that is less able to maintain a large home on a large lot.

6.7 Public and affordable housing

Madison Village has no public housing. The infrastructure needed to support public housing and the needs of those living there, both physical (utilities, fixed route public transportation) and social (public agencies, nearby employment, retail and personal services), are not available in or near the village or surrounding township.

The cost of maintaining a large house on a large lot – mowing and landscaping, snow clearing and exterior maintenance – is a burden to seniors who want to remain in their homes through their golden years. According to statistics from the 2000 Census, 12% of village residents are 65 years of age or older, compared to 14% for Lake County and 15% for the Cleveland PMSA. Free utilities provide some relief to older homeowners, helping them "age in place." Permitting a wider variety of housing options to be built, and encouraging the nearby location of convenient medical and retail services, will keep the village attractive and affordable to aging residents.

6.8 Goals and policies

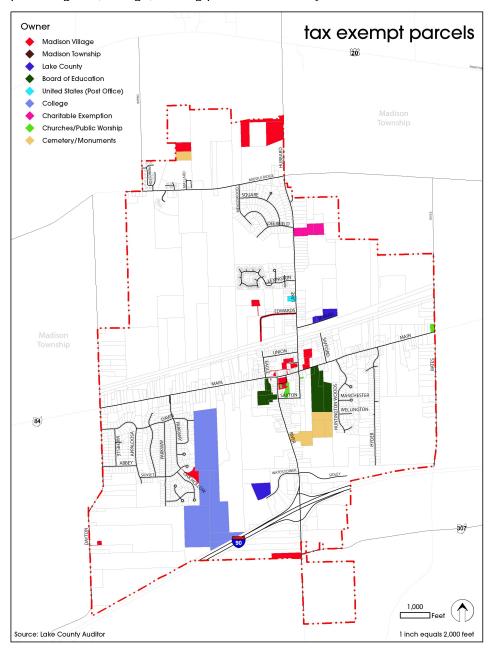
Each primary paragraph (in bold type) is a statement of a goal. The subparagraphs are policies for implementing the goal. Many goals and policies related to housing can be found in the Land Use element and throughout the plan.

- HS-1 The range of housing available in Madison Village should be diversified, but in a manner that preserves the "small town" and predominantly single family character of the community.
- HS-1-p1 Permit scattered, limited accessory dwelling units and two-family houses on lots served by public sewer and water service in the village center areas, subject to very strict design and siting requirements that would preserve the single family appearance of the house, site and neighborhood.
- HS-1-p2 Allow for a variety of housing sizes and price ranges in the village center area, to permit elderly residents to stay in the community as they age, young adults to live in the town as they start off their careers, and also provide move-up housing in a small town setting.
- HS-1-p3 Encourage honest, quality home design that reflects and respects the semi-rural character of the village, and the architectural heritage of the region.

7 Public facilities

7.1 Introduction

Madison Village, like many outlying and rural communities with a small population, does not have the same level of amenities as more densely populated urban and suburban areas. Resident surveys have revealed that there is little dissatisfaction with public facilities in the area; schools, parks, and other municipal facilities. As the population grows, though, existing public facilities may become stretched.



The intent of the Public Facilities element is to ensure that schools, parks, public safety facilities, community centers, and other government-provided amenities continue to meet, if not exceed, the needs of village residents and visitors, contribute positively to enhancing the overall quality of life, and preserve the small town character of the village.

7.2 Schools

Madison Village is part of the Madison Local School District (dark green parcels on previous map).

Pre-school programs are held at the Madison Memorial Complex, immediately east of the village center at 92 East Main Street.

Homer Nash Kimball School (K-5) is located at 94 River Street, immediately south of the village center. The capacity of Homer Nash Kimball School is 400 students, with enrollment above capacity at the time this plan was written, at 534 students.

Students attend grades six through eight at Madison Middle School, located at 1941 Red Bird Road at the north end of Madison Township. The capacity of Madison Middle School has a capacity of 574 students, but a current enrollment of 874 students.

Madison High School is located at 3100 Burns Road, north of Middle Ridge Road, in Madison Township. The high school is about two miles from the village center. Madison High School has a capacity of 1,073 students, and a current enrollment of 1,324 students.

THE OUTWARD EXPANSION OF SCHOOLS

Throughout the United States, and particularly in Ohio where an ambitious school construction program is underway, school sprawl is becoming a growing issue. As a result of inflated site standards, new schools are built at locations more distant and difficult to reach from the neighborhoods they serve. School siting policies also make it hard for built-up neighborhoods to retain old school buildings, even if they are structurally sound and architecturally impressive.

When the school anchors a neighborhood, both the students and residents benefit. The trend of building shopping mall-sized schools outside town alienates students, encourages sprawl, and impairs the sense of community and place. When schools are placed in a location beyond walking distance of most residential areas, children lose one source of exercise, and become at added risk for obesity.

This plan recommends working with the Madison School District to ensure that schools located in the village – Homer Nash Kimball and the Madison memorial Complex – remain open, despite any siting standards that mandate large parcels and buildings.

7.3 Parks and open space

There are two small public parks in Madison Village. The most prominent is the 1.5 acres square at the center of the village. A second 1.6 acre park (Dana Park) is located near the northeast intersection of Main St. and Lake Street behind the grocery store. The Madison Senior Center also has passive open space behind their facility and a 4th parcel known as Klingbeil Park is located behind the Main Street business.

The 1960 comprehensive plan proposed several small parks at the center of new neighborhoods through the village, many placed near proposed school sites. A somewhat larger park was proposed southwest of the village center, at the south end of what is now the site of the Kent State research facility site.

National and state park and recreation organizations and individual governmental agencies have established a varying range of definitions and standards including park type, size, access requirements, and site development guidelines. The standard derived from early studies of park acreages located within urban areas was the expression of acres of parkland per person. Over time, six to ten acres of developed parkland per 1,000 residents – mini-parks and tot lots, neighborhood parks, and community parks, not nature preserves, undeveloped parks, school grounds, private open space or school grounds – came to be the accepted standard recommended by the National Parks and Recreation Association. This ratio is used by a majority of communities in the United States.

Active recreation facility inventory and requiements. Madison Village									
Park/facility type	Target park/ facility size	Existing assets	Year 2000 minimum requireme nts	Deficiency	Buildout minimum requireme nts **	Deficiency			
Neighborhood park (including acreage for mini-parks)	4-12 ac; 4 ac/1,000 residents	3 ac	12 ac	9 ac	40 ac	37 ac			
Community park	20-50 ac; 6 ac/1,000 residents	0 ac	18 ac	18 ac	60 ac	60 ac			
Tennis courts*	1:2,500 residents	0	1-2	1-2	4	4			
Basketball courts	1:5,000 residents	0	1	1	4	4			
Volleyball courts	1:20,000 residents	0	1	1	1	1			
Baseball diamond	1:5,000 residents	0	1	1	2	2			
Softball diamond	1:5,000 residents	0	1	1	2	2			
Soccer/football fields	1:5,000 residents	0	1	1	2	2			
Swimming pool	1:20,000 residents	0	1	1	1	1			
1/4 mile running track	1:20,000 residents	0	1	1	1	1			
Handball/racquetball court*	1:20,000 residents	0	1	1	1	1			

1

1

1

1

2-5 ac/0.8-2.0 ac;

Dog park

Table 7.1

^{*} Ratio may be decreased due to the declining popularity of racquet sports.

^{**} Assumes population of 10,000 and no annexation of surrounding areas.

The village square is the only developed park in the village, resulting in just 1 acres of parkland per 1,000 residents. There are no public parks in any newer subdivisions in the village.

Table 7.2 Classification and minimum park area requirements Madison Village									
Park type	Area/1000 residents	Size of park	Service radius	Notes					
Mini park Designed to provide recreational opportunities for a small area in a neighborhood. Typically designed for young children, however in some cases it may be designed for aesthetic purposes.	1 ac	0.5 to 1 ac	0.25 to 0.5 mi	Madison Village has one mini park.					
Neighborhood park Designed to serve recreational needs of children 6-15 years of age, as well as adults, pre-schoolers, and seniors. Typically includes family picnic areas, unlighted open turf areas for informal sports, and play equipment. Lighted athletic fields would not be included.	3 ac	4 to 12 ac	0.25 to 0.75 mi	Madison Village has no neighborhoo d parks.					
Community park Designed to serve a wide variety of needs for youths and adults in both active and passive recreation. Facilities for sports fields (lighted when appropriate), open turf areas, playgrounds, picnic areas, and offstreet parking. Should include restrooms and related facilities. May include a community center. Components of neighborhood parks and mini-parks should be included in the community park.	6 ac	20 to 50 ac	1 to 2 mi	Madison Village has no community parks.					
Regional park Open space areas characterized by significant natural resources that provide passive recreation for nearby residents and the surrounding metropolitan area. Small portions of a regional park might be allocated to fulfill neighborhood park requirements.	15 ac	100 ac	Lake County, east Cuyahoga County	Although there are large parks in the area, none are located in Madison Village.					
Conservancy /open space area Land kept mostly in its natural state. Used to preserve natural areas such as riparian zones, bluffs, wetlands and other lands of recreational and scenic interest. May also include areas devoted to preservation of historic or cultural resources. Could include smaller portions of the area needed to satisfy local neighborhood recreational needs.	n/a	Sufficient to provide or preserve the resource	Northeast Ohio	Headlands Nature Preserve functions as a regional park.					

According to national standards, with a population of about 3,000 residents, there should be a minimum of 30 acres of developed parkland in the township. For a distant future population of 10,000, there should be at least 100 acres of developed parkland. Madison Village now has only or one fifth to one eighth the recommended amount of parkland for a community for a community of 3,000 people, and 1.5% of the amount recommended for 10,000 residents. The village square is a passive recreational area; there are no active amenities such as athletic courts or fields offered. (Table 7.1)

ACQUIRING NEW PARKLAND

The lack of a large commercial and industrial tax base it challenging for the village to generate the revenue needed to create and operate a large park system.

The village may impose park impact fees or parkland acquisition/park-in-lieu fees from new residential development. Open space needs should be discussed during initial planning meetings between the developer and village for new subdivisions. Agreed upon open space areas should be a part of the overall development plan and ultimately be turned over to the local homeowners association.

When a centrally located public facility is closed, such as a school, or a large tract of land owned by a government agency is up for sale, the village could pursue conversion of part or all of the now-available land to public parkland.

State and federal grants may be available to help fund the acquisition of parkland. The township should use every opportunity it has to find and acquire funding for new parkland where appropriate.

School grounds provide valuable opportunities for active recreation. However, there are constraints to their use as community recreational space. With educational use of school grounds as the primary use, schools are often unavailable for general public use.

STANDARDS FOR NEW PARKS

In many new subdivisions in Lake County, open space is often unusable; it may include areas behind houses that serve as an extension of a rear yard, areas under high tension power lines, and other areas that are wasted space. Parks and open space should be accessible, visible, defensible and usable. The following standards are recommended as the basis for siting new mini-parks, neighborhood parks and community parks.

- At least 50% of the perimeter of a neighborhood park, and at least 30% of the perimeter of a community park, must front on a public road. Exceptions could be made for large parks (more than 20 acres, or with more than 500 feet of street frontage), and linear parks (rails-to-trails, lakefront corridors, riparian corridors, etc.).
- Excepting trails and riparian corridors, parks must not take the form of narrow strips.
- Convenient pedestrian and vehicular access to parks must be provided.
- Parks and open space must not function as de facto backyards for adjacent residents.
- Parks and open space must be welcoming, and have adequate safety features.

- Retention ponds, wetlands that stay saturated through half the year or more, areas under high tension power lines, traffic islands and medians, and entrance features cannot be used in meeting total park or open space area requirements.
- Linking new parks to existing parks or other desirable land uses (schools, retail areas, cultural or institutional centers) will be encouraged.
- Parks must be improved with water, sanitary sewer (if available), storm sewer (if available) and electrical service. All utilities must be underground.

7.4 Public safety

FIRE DEPARTMENT

Fire protection in Madison Village is provided by the Madison Fire District, which also serves Madison Township. A fire station is located in the village center, at 33 North Lake Street between Madison Street and Union Street. The Fire District has 3 firefighters on duty from 06:00 - 10:00, four on duty from 10:00 - 22:00 and three on duty from 22:00 - 06:00. Apparatus at the village fire hall includes two ambulances, two engines, one run-about and the Chief's vehicle.

POLICE PROTECTION

Police protection in Madison Village is provided by a staff of 19 (3 full/ 12 part/4 auxillary) time patrol officers and one full-time chief of police. The Village also has a part time clerk and school crossing guard. The Lake County Sheriff Department provides specialized services, such as a SWAT team and bomb squad. Madison Village is also served by the Lake County Crime Lab, a division of the Lake County Prosecutor's Office. The Lake County Crime Lab is funded by a countywide tax levy. Most traffic violations and minor misdemeanor citations are tried in a Mayor's Court. Other Court cases are tried in Painesville Municipal Court or the Lake County Common Pleas Court.

This plan recommends that if a new public safety facility is built, it should be located as close as possible to the center of the village, but not on Main Street itself, where it could break up the row of turn-of-the-century commercial blocks. A public safety facility should house both the police department and fire department. This could create a unified, centrally-located public safety complex.

7.5 Village government

Forty-four acres of land are occupied by village facilities. Village Hall is located in a prominent location, 126 Main Street across the street from the village square. The road department is located on an 4.91 acre site at 177 Samuel St.. The water is located on a 2.78 acre site on Hubbard Rd and sewer department is located on an 3.51 acre site off Middle Ridge Rd.

This plan recommends that if a new village hall is built in the future, it should remain at the center of the village. A central location would reinforce the identity of the village, and validate the importance of village government.

Facilities that may include large parking and storage areas, such as vehicle yards, should be located in an area with low visibility, and heavily landscaped and screened.

7.6 Community and senior citizen centers

The Madison Senior Center, jointly funded by both the village and township, is located at 2938 Hubbard Road. Laketran provides free transportation to and from the center for village seniors.

If feasible, this plan recommends building a joint village/township community center in a location close to the village center. A community center should provide multiple meeting rooms, a large multi-purpose room, an exercise area with locker rooms, and a kitchen. Rental of community center facilities can help fund operation and maintenance of the center, and possibly provide some revenue for the village and township.

7.7 Goals and policies

Each primary paragraph (in bold type) is a statement of a goal. The subparagraphs are policies for implementing the goal.

- PF-1 The Madison School District will continue to offer high quality, conveniently located public schools.
- PF-1-01 Work with the Madison School District to ensure potential expansion needs are fulfilled should enrollment projections change.
- PF-1-02 Ensure that Homer Nash Kimball elementary school remains open at its current location, to prevent school expansion that often results from school relocation to less populated areas.
- PF-2 Parks must not be considered a luxury, but an essential component needed to improve residents' quality of life, maintain and enhance the desirability of residential areas, attract new middle and upper income residents, and offset the visual impact of blighted and abandoned industrial areas. Parkland must be expanded to meet the present and future needs of township residents, serve the recreational needs of residents and visitors, protect irreplaceable natural resources, and preserve the low-density suburban character of the township.
- PF-2-01 Parkland should be distributed evenly throughout the village, with locations and facilities based on the recommendations of this plan.
- PF-2-02 Work with Lake Metroparks to acquire and maintain land throughout the village for new active and passive parks.
- PF-2-03 Ensure that new parkland and open space is accessible, defensible, and centrally located, with a sizeable percentage of its perimeter fronting a street. Discourage the use of marginal land, narrow linear tracts, and areas hidden behind back yards for parkland and open space

- PF-2-04 Use every opportunity to find and acquire outside funding to acquire open space and new parkland.
- PF-3 Quaility public safety facilities and services should continue to be offered.
- PF-3-01 Site a future joint public safety facility, accommodating both police and fire agencies, in the village center. Ensure adequate land is available for future expansion of the facility.
- PF-3-02 Work with the Fire Department to maintain and improve the fire class rating, to lower insurance costs for residents and businesses.
- PF-4 Town government facilities will be improved.
- PF-4-01 Keep the village hall in the village center area, should a new facility be built. The site should be visually prominent, contribute to creating a sense of place, and play an important role in reinforcing the village center.
- PF-4-02 Locate village maintenance and yard facilities in an area that is inconspicuous as possible. Arrange yard facilities so equipment, garages, vehicle and raw material storage areas, and heavily traveled internal access aisles are screened from the public right-of-way and nearby residences. Use landscaping and screening to soften the visual impact of such facilities.
- PF-5 Provide a community center for village and township residents.
- PF-5-01 Site a community center in the village center area, to reinforce the area as the symbolic center of the community.
- PF-5-02 Consider reuse of the Village Hall building as a community center, if the town offices are ever relocated from the building.

8 Utilities

8.1 Introduction

Villages usually have a higher level utility service than what is typically found in neighboring townships and nearby exurban communities. This plan would be incomplete if utilities were ignored. Thus, this plan provides a basic inventory of utility services in the community, and offers related goals and policies.

Please note this is not a capital improvement plan. A capital improvement plan is a budgetary document that links the programming of capital projects, such as public utilities, to the planning goals found in this document. The role of the village's utilities as a tool to promote long-term growth and economic stability can be found in the economic development element.

8.2 1963 Comprehensive Plan

The 1963 Madison Village Comprehensive Plan included a "community services" element that provided an inventory of and basic policies for water supply, sanitary sewers, storm drainage, public buildings, and private utilities (electric and natural gas distribution).

Recommendations of the 1963 plan related to utilities include:

- Connecting the village water system, at the time drawing its water supply entirely from wells, to lake intake and treatment facilities.
- Consolidating the village sewer system into a larger, then-proposed county sewer system.
- Eliminating storm water from entering the sanitary sewer system.
- Establishing a storm drainage system.

8.3 Water service

The village owns and maintains water lines, and buys water from the Lake County Department of Utilities. The system can be expanded to accommodate development. According to the 2000 census, 94.8% of housing units in the Village are served by the public water system. The former village well system is no longer used, but can be reactivated as an emergency backup system.

In Question 4 of the resident survey, residents were asked to rate the quality of 20 community services and attributes. The public water system was given a median rating of 3.6 on a scale of 1 (poor) to 5 (very good). Question 9 of the resident survey asked users to score the importance of 26 various issues that may be addressed in this plan. Among utilities-related issues, water availability scored 4.56 on a scale of 1 (not important) to 5 (most important).

8.4 Sewer service

The Madison Village sewer is a gravity sanitary system, originally built in the 1930s and incrementally updated. According to data from the 2000 Census, 742 housing units in Madison Village (82.8%) are connected to the village sewer system. (Remaining households have septic tank or cesspool systems.)

In Question 4 of the resident survey, residents were asked to rate the quality of 20 community services and attributes. The public sewer system was given a median rating of 3.37 on a scale of 1 (poor) to 5 (very good). Question 9 of the resident survey asked users to score the importance of 26 various issues that may be addressed in this plan. Among utilities-related issues, sewer capacity lines scored 4.39 on a scale of 1 (not important) to 5 (most important).

The current sanitary sewer system is approaching capacity. The ability to expand the sewer system is critical in attracting desired businesses and industries to the village. Given the current financial state of the village and the debt load of the water and sewer department, expansion of the sewer system is now financially unfeasible. The 1963 comprehensive plan recommended consolidating the village sewer system into a larger, then-proposed county sewer system. Following the recommendation of the 1963 plan may be the most feasible solution to the village's sewer issues. Any consolidation plan must address how remaining debt load will be repaid, since the revenue from the sewer system will no longer be directed to village coffers.

DEVELOPMENT WITHOUT SEWER SERVICE

The lack of sewer and water service in an area can keep the overall capacity for development low, and help in part to preserve an exurban and rural character many residents find important.

Unsewered commercial districts in rural and exurban communities are often dominated by vehicle-related uses, such as auto and truck dealers, tire stores, gas stations, auto repair and body shops, and heavy equipment rental; and commercial uses such as mini-storage facilities and contractor yards. Mechanical commercial uses generate little wastewater, so the lack of a sewer system is not a critical factor in their site selection. However, the strip of undesirable commercial uses in the area can present a poor impression of the corridor to travelers and prospective residents.

Federal Environmental Protection Agency (EPA) regulations prohibit package plants that could otherwise serve limited commercial uses, because they could harm the sensitive watershed areas in eastern Lake County. Most commercial uses desired by town residents, such as supermarkets, mid-end retail development, and sit-down restaurants, create more wastewater than what can be handled by a septic system.

A lack of sewers also limits potential industrial uses – and the accompanying property tax revenue – to a few that generate little wastewater.

THE EFFECTS OF SEWER EXPANSION

The extension or improvement of infrastructure can determine the carrying capacity of land, and influence its future use. Sewer service can increase the value and development capacity of a property. Sites served by sewer lines can better accommodate middle-end retail and restaurant development, and make them less viable locations for low-end commercial and semi-industrial uses.

The benefits of sewer service carries a price. Sewer and water service is one driving force of rapid development. Too often, costly sewer and water line extensions have been made without considering what consequences they will have on growth, and whether they will generate growth in areas once perceived as undevelopable and therefore never planned.

The premature extension of sewer lines into an area may promote development that conflicts with the land use goals of this plan. The availability of sewer service outside of the village center would encourage a pattern of strip development, because the lack of sewer service would no longer be a barrier to developing a property; sewer service makes intensive commercial and retail development feasible at any location. This could also prevent redevelopment or more intensive use of the village core, and accelerate conversion of agricultural land to commercial and residential use.

THE NEED FOR COORDINATION

In areas with development potential, land use and sewer plans are should be coordinated to the highest degree possible. With no coordination, a land use plan may be ineffective and almost impossible to implement. Decisions and policies to withhold or extend infrastructure will shape development patterns more than comprehensive plan designations or zoning.

The need for better coordination between land use and sewer plans will be necessary in the future, to prevent premature sewer expansion, reduce the rate of unplanned development, and make a comprehensive plan a more effective tool for controlling growth.

Recent discussions with Lake County to combine into the overall system and the formulation of the Comprehensive Plan are positive steps for the long term impact of future sewer service in the Village.

8.5 Electricity service

First Energy (formerly CEI) provides electrical service to the entire village.

Most electric utility lines in the village are above ground, strung on poles placed in the public right-of-way. Utility lines are buried in the newest subdivisions. Undergrounding existing utility lines is expensive; more so in low-density exurban communities. Nonetheless, the village should work towards a long-term goal of placing all utility lines underground. New electrical substations should be carefully placed, and well-designed and screened so they are visually unobtrusive.

First Energy has not announced any plans to provide broadband over power line (BPL) service in Madison Village or Lake County.

Question 9 of the resident survey asked users to score the importance of 26 various issues that may be addressed in this plan. Among utilities-related issues, overhead utility lines scored 3.48 on a scale of 1 (not important) to 5 (most important). Question 10 offered statements regarding the built environment and other qualities of the village, and asked respondents to rate how strongly they agreed or disagreed

with them. There was general agreement with the statement "Overhead utilities should be placed underground" (+0.71, median +1, mode +2).

8.6 Natural gas service

The entirety of Madison Village has natural gas service, provided by Dominion Energy.

According to 2000 census data 886 housing units (80%) in Madison Village are heated with natural gas. In 1990, 702 units (80.4%) were heated with natural gas.

8.7 Telephone and broadband ADSL service

Telephone service in Madison Village is provided by Windstream Communications (formerly Alltel Ohio/Western Reserve Telephone Company). DSL broadband Internet service is available in much of the village. Service availability depends on proximity to central switching offices.

Telephone lines are above ground in parts of the township where electrical lines are also above ground.

8.8 Cable television and cable broadband service

Time Warner Cable provides cable television and high speed Internet access throughout Madison Village. Cable lines are above ground in areas of the township where electrical lines are also overhead.

8.9 Goals and policies

Each primary paragraph (in **bold type**) is a statement of a goal. The subparagraphs are policies for implementing the goal. Many goals and policies related to utilities can be found in the throughout the plan.

- UT-1 Water and sewer systems will accommodate future residential, commercial and industrial development.
- UT-1-P1 Consider merging the village sewer and water system into the larger county sewer network.
- UT-1-P2 Discourage unnecessary or premature expansion of sewer services.

 Critically review expansion and upgrade of sewer service in low priority expansion and improvement areas outside of the village core. Consider the possible harmful effects of sewer expansion in agricultural areas.
- UT-1-P3 Work with the Lake County Utilities Department and other agencies and officials to support better coordination of sewer plans with underlying land use plans. Educate staff and public officials about the ties between utility expansion and development.

UT-1-P4	Maintain water service. Conduct regular inspection and routine maintenance of water lines. Ensure facilities are available to serve new development and that water pressure and overall system reliability is not reduced with the addition of new customers.
UT-2	The visual impact of wired utilities will be decreased.
UT-2-P1	Encourage utility companies to work with property owners and lessees when siting utility facilities.
UT-2-P2	Require undergrounding of all wired utilities, such as electricity, telephone, and cable television service, in all new subdivisions.
UT-2-P3	Require undergrounding of existing overhead utility lines when commercial development occurs on the site.
UT-2-P4	Work towards a long-term goal of undergrounding all wired utilities in the village.
UT-2-P5	Require visual screening for new utility substations. Work with utility companies to screen existing utility substations.
UT-3	Telecommunications infrastructure will remain up-to-date.
UT-3-P1	Work with telephone and cable television companies to ensure the township is provided with the same level and quality of service and technology as in urban areas.
UT-3-P2	Work to ensure high-speed Internet access is available to all residents and businesses in the township.

9 Economic development

9.1 Introduction

Today Madison Village is an exurban community with an economy rooted in nurseries, and small retail and service businesses. In recent years, with increased residential development, the role of agriculture has diminished. Resident opinions are split regarding commercial and industrial development; some favoring it, because it will shorten long drives for daily errands and provide a boost to the underlying tax base; others opposing it because of the threat it could pose to the valued small town character of the community.

The Economic Development element identifies policies and strategies that will address the well being of Madison Village– its communities, businesses and residents – in a local and regional economic context. It includes analysis of the local economy assessing its strengths and weaknesses in terms of the scope and character of the local employment base, the relationship between the local labor force and local opportunities for employment, and an assessment of current and future needs of the community.

The intent of the Economic Development element is to plan for increasing the employment and tax base and the diversity of retail services in the village, while ensuring the small town character of the community is not irreparably harmed.

9.2 Economic influences

Lake County and Madison Village are influenced by overall economic trends in northeast Ohio. Locally, the agricultural landscape, Interstate 90 and potentially the lakefront are directly related to the economy of the village. Although there are limited commercial businesses in the village core, most day-to-day needs are met by businesses located along the North Ridge Road/US 20 corridor in Madison Township, and retail centers elsewhere in Lake and Ashtabula counties.

The amount of retail leakage in Madison Village – the difference between actual and potential retail sales in a community, or the amount of retail sales lost to other communities – is high, although the exact amount cannot be determined without a detailed retail study. There is no opportunity to counter retail leakage, because there are no local alternatives providing the goods and services township residents are seeking elsewhere.

According to a retail survey conducted by the Lake County Planning Commission in 2000, Madison Village has about 75,000 square feet of retail space, an amount slightly larger than that of a new supermarket. 51,461 square feet is devoted to food service, food sales, and retail convenience products, or 17.6 square feet for every Madison Village resident. By comparison, there is 18.3 square feet per resident for all of Lake County. Madison Village does not have a major supermarket or drugstore, and has very little very retail space devoted to durable goods – department stores, appliance stores, furniture stores and related uses.

Major barriers to retail, commercial and industrial development include the low number of "rooftops" or residents, and the limitations of sewer service. Being located on the fringe of the Cleveland metropolitan area makes Madison Village a less-thanideal location for general office uses. However, offices for professional and medical uses that serve the local population and residents of surrounding villages and townships are feasible.

There is only a very small manufacturing base in Madison Village. Perfection Corporation, a manufacturer of mechanical joining products for natural gas and propane gas distribution systems, announced they will be relocating to North Carolina. Chemmasters is a manufacturer of specialty construction products to repair, and protect concrete and masonry.

The nursery industry remains the anchor of Madison Village and Lake County agriculture. The 1998 Census of Horticultural Specialties counted 68 horticultural operations in the county, generating \$59,153,000 in total sales, and \$54,656,000 in wholesale sales. The Nursery Growers of Lake County have tallied over 100 nurseries in Lake County, generating an estimated \$90,000,000 in annual wholesale sales. The Nursery Growers of Lake County claim the nursery industry employs 2,700 full and part time workers; this statistic includes nine nurseries outside of Lake County.

COST OF COMMUNITY SERVICES

According to cost of service studies conducted by municipalities throughout the United States, the cost of providing services for residential uses is greater than the property tax revenue they generate. Commercial and industrial uses pay more in taxes than the cost of services they use, essentially subsidizing residential uses and decreasing their tax burden.

Developed by the American Farmland Trust in 1990, cost of community service studies are being completed by communities throughout Ohio. These studies allow community leaders to evaluate how their revenues compare with their expenditures.

Table 9.1 Cost of service studies in Ohio										
	Cost of services used for every \$1 paid in property tax									
Community	Residential	Commercial and industrial	Agricultural							
Madison Village / Lake County (1993)	\$1.67	\$0.20	\$0.39							
Madison Township / Lake County (1993)	\$1.40	\$0.25	\$0.30							
Hocking Township / Fairfield County (1999)	\$1.10	\$0.27	\$0.17							
Liberty Township / Fairfield County (1999)	\$1.15	\$0.51	\$0.05							
Union Township / Ross County (1998)	\$1.00	\$0.31	\$0.60							
Huntington Township / Ross County (1998)	\$1.01	\$0.38	\$0.19							
Madison Village / Lake County (2007)	\$1.16	\$0.32	\$0.37							
(Prindle 1999, 2000; American Farmland Trust 1993)										

The outcome is a ratio of the amount of money needed to provide public services (fire, police, education, community centers, and so on) for every dollar collected in property taxes.

The results of these studies support the claims presented by smart growth advocates, farmland preservation taskforces, and local citizens; conventional suburban residential development requires higher financial resources in the long term to provide public services. Table 9.1 illustrates the similar results in Madison Village, Madison Township, and four other Ohio townships that conducted cost of service studies.

In 2006, for every dollar in property taxes paid by residential property owners in Madison Village, \$1.16 in services is required. Services provided to residents are subsidized by commercial and industrial property owners; for every dollar they pay in property taxes, they require 32 cents in services.

Current and future leadership should carefully evaluate the long-term impacts of current levels of services provided, and the impact of residential development on the village revenue stream without adequate commercial and industrial development to offset it.

9.3 Desired businesses

A survey conducted as part of the planning process for the US 20 Corridor Plan for Madison Township asked respondents to score the desirability of different types of businesses and land uses that might be found along the corridor. Sit-down restaurants, nurseries, offices, banks, grocery stores, and small-scale retail scored at the top, while commercial and semi-industrial uses such as vehicle and engine repair and service, auto parts stores, heavy/construction equipment sales and rental, auto, truck and RV sales, contractor yards, mobile home parks and mobile home sales ranked at the bottom.

A recurring theme of written survey responses and public meeting comments, in Madison Village and in surveys conducted in nearby communities, is that "there's no place to shop." Most consumable goods such as groceries and drugs could be found in Perry and Madison Townships, but the options for clothing, furniture, appliances, and other durable and dry goods are extremely limited. Retail uses are limited in Madison Village; small grocery and convenience stores and antique and gift stores predominate. The selection of restaurants is also very limited; either small diners with limited hours, taverns with a kitchen, or fast food. There are no movie theaters, miniature golf courses, arcades, bowling alleys, or other outlets for entertainment. Low-end uses such as dollar stores are common in Perry Township and Madison Township.

Retailers often have very firm ideas about what is considered an ideal location, and these ideas do not necessary mesh with what a community has to offer. While a municipality or township has sites where it would like to see a store or restaurant locate, the retailer has its own ideas about where it would like to go. More often than not, these sites are not the same

Retail and restaurant site selection specialists often use a formula to determine whether a market is a viable location for a store or restaurant. Criteria determining an ideal location are mostly quantitative, and usually include the following.:

- Population living in a certain radius (mileage and driving time).
- Percentage of families versus singles in a certain radius.
- Average family and household income in a certain radius.
- Average age of the population in a certain radius.
- Cumulative income of all people in a certain radius.
- Education level in a certain radius.
- Number of jobs in a certain radius.
- Traffic volume at a location.
- Utility availability at a location.
- Proximity of other mid- and high-end retail development (positive).
- Proximity of low-end commercial development (negative).
- Property size and geometry.
- Potential return on investment.

	Score	Score (-2 strongly oppose to +2 strongly support)					
Business type or land use		All received surveys		Residential		Business owners/mgers	
		Standard deviatio				Standard deviation	
Sit-down restaurants	1.20	1.11	1.23	1.07	1.00	1.39	
Nurseries	0.70	1.27	0.77	1.23	0.08	1.42	
Entertainment (movie theaters, etc.)	0.78	1.28	0.76	1.28	1.00	1.21	
Medium-scale retail and commercial	0.73	1.23	0.72	1.24	0.84	1.21	
Small-scale retail and commercial	0.73	1.10	0.70	1.10	0.99	1.03	
Grocery stores	0.70	1.22	0.69	1.22	0.73	1.26	
Professional and medical offices	0.66	1.08	0.64	1.07	0.84	1.17	
Banks	0.43	1.10	0.41	1.10	0.61	1.09	
Large big box stores	0.39	1.60	0.39	1.59	0.33	1.70	
Medium big box stores	0.41	1.43	0.38	1.43	0.60	1.39	
Information technology	0.36	1.01	0.33	0.99	0.59	1.10	
Light industry	0.29	1.28	0.25	1.27	0.60	1.28	
Single family houses	0.17	1.34	0.18	1.34	0.05	1.39	
Gas stations	0.17	1.15	0.13	1.16	0.47	1.02	
Personal services	0.13	1.07	0.09	1.08	0.43	0.99	
Convenience stores	0.00	1.22	-0.03	1.22	0.28	1.20	
Hotels and motels	0.01	1.35	-0.05	1.34	0.54	1.37	
Auto parts stores	-0.09	1.11	-0.11	1.11	0.11	1.08	
Fast food restaurants	-0.10	1.26	-0.12	1.25	0.04	1.35	
Vehicle and engine repair and service	-0.19	1.17	-0.22	1.16	0.06	1.22	
Townhouses	-0.28	1.29	-0.29	1.28	-0.17	1.31	
Auto, truck and RV sales	-0.52		-0.56	1.15	-0.16	1.27	
Heavy equipment sales and rental	-0.64	1.15	-0.69	1.14	-0.21	1.21	
Contractor yards	-0.68	1.11	-0.71	1.09	-0.38	1.23	
Apartment complexes	-0.71	1.21	-0.73	1.20	-0.49		
Mobile home sales	-0.85	1.10	-0.88	1.08	-0.60	1.23	
Mobile home parks	-1.19	1.11	-1.21	1.09	-1.00	1.24	

Each of these criteria carries a different weight, depending on the type of business. A bookstore may place a greater emphasis on the education and income in an area, while chain restaurants often look at the employment base in the area, so they can profit from lunch as well as dinner business. Sewer service is more important for uses that generate plenty of wastewater, such as sit-down restaurants.

For example, despite a lack of competition, Starbucks is unlikely to locate in Madison Village or surrounding communities until after stores have been opened in other locations the chain considers more lucrative. The chain prefers locations with a high percentage of well-educated residents in their 20s and 30s, a large nearby employment base of office workers, or along a busy commuting route to an office district.

Lack of competition in the area, a lack of retail development, vocal resident demand, and a positive "gut feeling" are, unfortunately, only considered very minor factors in site selection, if at all. A surplus of commercial-zoned land, property taxes and leniency of zoning and architectural regulations are usually not considered at all.

All businesses seek a high potential return on investment. A store may make a profit in Madison Village, but if there is the opportunity of a greater return in another area, the chain will locate an outlet there instead, not developing in the village until most of the other more lucrative locations have been developed.

The mantra of commercial developers is "retail follows rooftops." The population of eastern Lake County is growing at a slow pace. Among site selection specialists, the small, low-density population base of the area is a liability compared with more populated areas. The presence of a new Wal-Mart store in Madison Township may attract the attention of national retailers scouting for new store locations. The middle-class, blue-collar-leaning demographics of the surrounding area is highly sought-after by mid-end retail chains such as Home Depot, Michael's and Old Navy. However, new retail uses will likely locate closer to the new Wal-Mart.

New retail businesses will not be attracted to Madison Village by handouts and incentives, low taxes, or lenient zoning or signage regulations. Instead, they will look at the population within an easy driving distance of the store, the average income of those living nearby, high traffic volumes, utility availability, and the prospect of a high return on their investment compared to other possible locations.

Despite the challenge in attracting desired businesses, community officials can be proactive in promoting the village center and the Exit 212 area as an ideal site for retail development. Future demand may warrant the extension of both Watertower Drive and RW Parkway to capitalize on the highway frontage sought after by the private sector. Village officials should also working closely with land owners, and network with commercial developers in the Cleveland area.

9.4 Incentives for economic development

Retailers establish a business at a location because a market exists for a product or service they offer. Incentives are not required to lure a new retail business, and few government agencies in the United States offer direct incentives to retailers. However, they may fund general improvements such as streetscape beautification and new infrastructure, to create an environment that is more attractive to retail

businesses. Tax increment financing (TIF) districts, where improvements are funded with bonds that are paid back from the revenue of increased property taxes directly resulting from those improvements, are also used to fund improvements that will attract retail development.

Use of incentives and other government assistance, such as property acquisition through eminent domain, should not be directed at specific retail businesses. Such incentives amount to a local government subsidy of a retailer that will compete with established merchants, giving it an unfair advantage in the marketplace. Incentives should not be offered to national retailers that would probably be established in the community even if such a benefit were not offered. Incentives should also not be offered for retail projects that may hurt shopping districts in surrounding communities.

The majority of village residents want more commercial development, but it is important not to rush to get it. The intent of attracting more retail and commercial uses to the village should be to reinforce a sense of place by encouraging more pedestrian traffic-generating uses in the village center, provide greater convenience to residents that normally have to travel long distances for day-to-day needs, and diversify the tax base. Subsidizing commercial and industrial uses by offering tax abatement or other financial incentives may attract some businesses in the short term, but long-term use of such benefits would be contrary to the intent of attracting them to begin with.

9.5 Smart Growth and economic development

Recognizing the importance of economic development issues and their role in smart growth, in 1997 the Local Government Commission developed a set of 15 principles specifically focused on economic development. The Ahwahnee Principles for Economic Development promote the following.

- 1. Integrated approach. Government, business, education, and the community should work together to create a vibrant local economy, through a long-term investment strategy that encourages local enterprise, serves the needs of local residents, workers, and businesses, promotes stable employment and revenues by building on local competitive advantages, protects the natural environment, increases social equity, and is capable of succeeding in the global marketplace. For the village, this means an emphasis on small, locally owned businesses that offer middle-class and higher wages, which produce a product or offer a service that meets a need not just locally, but regionally and nationally.
- **2. Vision and inclusion.** Communities and regions need a vision and strategy for economic development according to the principles. Visioning, planning and implementation efforts should continually involve all sectors, including the voluntary civic sector and those traditionally left out of the public planning process. The Comprehensive Plan should be a start for a larger economic development planning effort in the village, which includes businesses, community officials, and residents.
- **3. Poverty reduction.** Economic development efforts should be targeted to reducing poverty, by promoting jobs that match the skills of existing residents, improving the skills of low-income individuals, addressing the needs of families moving off welfare,

and insuring the availability in all communities of quality affordable child care, transportation, and housing.

- **4. Local focus.** Because each community's most valuable assets are the ones they already have, and existing businesses are already contributing to their home communities, economic development efforts should give first priority to supporting existing enterprises as the best source of business expansion and local job growth. Luring businesses away from neighboring communities is a zero-sum game that creates no new wealth in the regional economy. Community economic development should focus instead on promoting local entrepreneurship to build locally-based industries and businesses that can succeed among national and international competitors.
- **5.** Industry clusters. Communities and regions should identify specific gaps and niches their economies can fill, and promote a diversified range of specialized industry clusters drawing on local advantages to serve local and international markets. The manufacturing sector of Lake County includes a growing cluster of businesses related to aircraft parts, medical equipment, and precision machinery. This niche could form the foundation for enhancing a manufacturing-based local economy, and compensate for the loss of heavier industrial operations. New white-collar jobs based on engineering and research in specialized industry sectors can complement manufacturing-based jobs, and provide a more diversified, recession-resistant local economy.
- **6. Wired communities.** Communities should use and invest in technology that supports the ability of local enterprises to succeed, improves civic life, and provides open access to information and resources. High-speed broadband Internet service, and universal wi-fi connectivity, will make the village more attractive to home-based businesses. Many exurban communities throughout the United States, although few in Ohio are considering community wi-fi networks,
- **7. Long-term investment.** Publicly supported economic development programs, investments, and subsidies should be evaluated on their long-term benefits and impacts on the whole community, not on short-term job or revenue increases. Public investments and incentives should be equitable and targeted, support environmental and social goals, and prioritize infrastructure and supportive services that promote the vitality of all local enterprises, instead of individual firms.
- **8. Human investment.** Because human resources are so valuable in the information-nation age, communities should provide lifelong skills and learning opportunities by investing in excellent schools, post-secondary institutions, and opportunities for continuous education and training available to all. Vocational education and skills training should be continued on a regional basis, creating a pool of talent that would be an incentive for employers to locate in the area.
- **9. Environmental responsibility.** Communities should support and pursue economic development that maintains or improves, not harms, the environmental and public health. Development should respect and maintain the environmental well-being and small-town atmosphere of the village; watersheds, tree cover, air quality and lack of noise and light pollution.
- **10. Corporate responsibility**. Enterprises should work as civic partners and stewards, contributing to the communities and regions where they operate, protecting the

natural environment, contributing to civic affairs, and providing workers with good pay, benefits, opportunities for upward mobility, and a healthful work environment.

- 11. Compact development. To minimize economic, social, and environmental costs and efficiently use resources and infrastructure, new development should take place in existing urban, suburban, and rural areas before using more agricultural land or open space. The use of vacant land closer to the village center rather than existing nursery land is strongly encouraged.
- **12. Livable communities.** To protect the natural environment and increase quality of life, neighborhoods, communities and regions should have compact, multidimensional land use patterns that ensure a mix of uses, minimize the impact of cars, and promote walking, bicycling, and transit access to employment, education, recreation, entertainment, shopping, and services.
- 13. Center focus. Communities should have an appropriately scaled and economically healthy center focus. At the community level, a wide range of commercial, residential, cultural, civic, and recreational uses should be located in the town center or downtown. Concentrating development in a traditional town center, if developed, meets this principle.
- **14. Distinctive communities.** Having a distinctive identity will help communities create a quality of life that is attractive for business retention and future residents and private investment. The village must work to reinforce its sense of uniqueness, attractiveness, history, and cultural and social diversity, and a strong local sense of place, keeping it distinct from other exurban communities.
- **15. Regional collaboration.** Since industries, transportation, land uses, natural resources, and other key elements of a healthy economy are regional in scope, communities and the private sector should cooperate to create regional structures that promote a coherent metropolitan whole that respects local character and identity.

This plan recommends that all economic development efforts conform to the Ahwahnee Principles for Economic Development and smart growth principles in general.

8.9 Goals and policies

Each primary paragraph (in bold type) is a statement of a goal. The subparagraphs are policies for implementing the goal. Many goals and policies related to utilities can be found in the throughout the plan.

- ED-1 As appropriate, smart growth principles will be part of the foundation for economic development in Madison Village.
- ED-1-p1 Use sound long-term planning principles, including concepts embodied in the Ahwahnee Economic Development Principles, to guide economic development in the village.
- ED-1-p2 Ensure economic development efforts directed towards commercial or retail development have the intent of protecting and reinforcing a distinctive sense of place, and creating or maintaining a vibrant community center.

- ED-2 Strictly controlled commercial development will be encouraged to serve the needs of local residents and create a balanced tax base.
- ED-2-p3 Discourage commercial development that tends to be visually or environmentally disruptive by its very nature; i.e. preferences towards large or tall signs, intensive lighting required, large impermeable surface areas needed, idling vehicles inherent as part of the use, and so on. (See Land Use element)
- ED-3-p3 Ensure industrial development, if permitted, is located where it does not disrupt traffic patterns or disturb rural character. (See Land Use element)
- ED-3 Encourage agri-tourism to promote economic development, help nursery and agricultural uses remain economically viable and competitive with non-agricultural uses of the land, and maintain the semi-rural character of the village.
- ED-3-p1 Work with local farmers, tourism associations, agricultural trade associations, the local Cooperative Extension agency, and other agencies to develop coordinated programs that promote agri-tourism. (See Land Use element)
- ED-3-p2 Limit regulation of farm improvement projects and routine agricultural operations only to the extent to protect health, safety and welfare. (See Land Use element)
- ED-3-p3 Remove barriers in the village zoning resolution that prohibit agritourism related land uses. (See Land Use element)
- ED-4 Economic development efforts will be primarily market-oriented, and not driven by incentives.
- ED-4-p1 Use of incentives and other government assistance, such as property acquisition through eminent domain, should not be directed at specific retail businesses.
- ED-4-p2 Discourage subsidizing commercial and industrial uses with tax abatement or other financial incentives that would place the burden of tax revenue generation on residential uses and existing businesses.
- ED-4-p3 Discourage the granting of zoning variances to permit development that is visually intrusive, or which would harm the sense of place and small-town character of the village, for the sake of attracting a business or the community.

10 Natural resources

10.1 Introduction

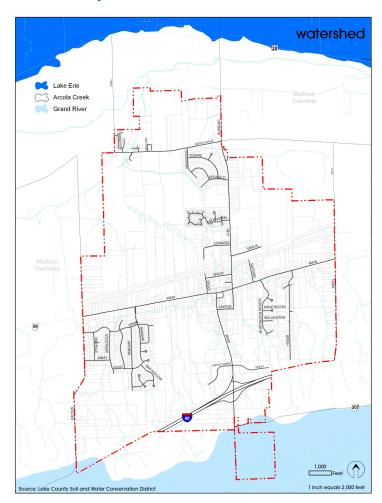
Natural and environmental resources help define the character of the village, support the natural systems that provide for wildlife and a healthy environment, provide recreational and educational opportunities, and form the basis of its economy. This begins with unique soils, Lake Erie, stream valleys and watersheds, remaining wooded tracts, and species habitats. At the same time, the village's natural resources must be safeguarded from adverse impacts of urbanization. This includes flooding, air and water pollution, groundwater contamination, noise, light and glare, and visual clutter from signs and utility structures.

The Natural Resources element addresses rivers, streams, watersheds, woodlands and urban forestry, air quality, noise pollution and light pollution, to ensure that the natural features that define Madison Village are protected and enhanced. The intent of this element is to promote the conservation and integration of natural systems and resources with a growing residential population, and reduce the impacts of manmade development on the community, property and lives of the residents.

10.2 Watersheds, waterways and wetlands

WATERSHED

A watershed is an area designating where water will flow. If it rains along the Lake Erie shoreline, the water will flow directly into Lake Erie. If it rains in the center of the Village, water will flow into a stream that leads to Arcola Creek, and eventually enter Lake Erie. Most water that enters a watershed in the Village will make its way into Lake Erie, while some will go to the Grand River.



EFFECTS OF SUBURBAN DEVELOPMENT

Suburbanization in a watershed can have adverse effects on streams and receiving waters. Effects include increases in flooding, stream bank erosion, and pollutant transport. Development results in surfaces such as rooftops, roads and parking lots, which render much of a watershed impervious to rainfall. Rainfall is unable to percolate into the soil, and instead is converted into runoff, which can overwhelm the existing drainage system of natural stream tributaries. Thus, drainage improvements, such as curbs, channels, or storm sewers, must be constructed to direct and convey the runoff through the watershed.

At the receiving end of the stormwater conveyance network, a stream channel must adapt to new hydrologic conditions. The primary adjustment is through channel widening, which occurs through stream bank erosion. Stream banks become undercut and slump into the channel. Trees that once provided bank stability become exposed at the roots and are more likely to fall, further destabilizing adjacent land. Large quantities of sediment eroded from stream banks remain in the channel as shifting deposits of mud and sand. This can have a dramatic impact on habitats of fish, mussels and aquatic insects.

Other changes accompanying suburbanization, such as changes in water temperature, oxygen levels, and pollutants carried in the runoff, can also adversely affect aquatic wildlife. In the natural system, pollutants in the runoff are removed from the water as it soaks into the ground or flows through the organic litter at the soil surface. With urbanization, these areas are replaced with pavement and buildings, and deposited pollutants are washed directly into stream channels. Pollutants in urbanized streams are frequently ten times higher than in predevelopment streams. These pollutants and conditions include suspended sediment, nutrients (phosphorus and nitrogen, usually from fertilizer and equestrian waste), oil and grease, trace metals, chlorides or salts, and thermal effects due to reduced vegetation cover over the stream. These pollutants and conditions affect not only the receiving stream, but also downstream waters, such as wetlands and Lake Erie.

Common tools include detention basins that temporarily store and slowly release runoff from large storms to reduce peak stormwater discharges, and restricting development in stream floodplains that are susceptible to frequent flooding. While both approaches have been effective in curtailing flooding problems, they cannot entirely mitigate the impact of urbanization on stream habitat through increased pollutant transport.

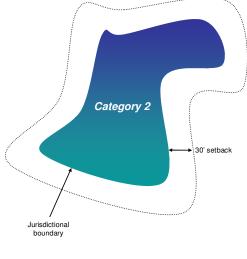
RIPARIAN SETBACKS

Riparian areas are naturally vegetated lands along rivers and streams. When appropriately sized, these areas can limit stream bank erosion, reduce flood size flows, filter and settle out pollutants, and protect aquatic and terrestrial habitat. Riparian setbacks are a tool local governments can use to maintain riparian area functions. Madison Village can establish riparian setbacks through a combination of landowner education, land acquisition, and land use controls on new development. The Lake County Soil and Water Conservation District, land trusts, and other organizations are skilled in assisting communities and landowners with education and acquisition efforts.

Riparian Network

Designated watercourse: <1 sq. mi. drainage area 75' setback Floodplain Extend setback to edge of FP

Isolated Wetland



NOTES:

- Where floodplain or wetland area is wider than the minimum riparian setback on either or both sides of the designated watercourse, the setback is extended to the outermost boundary of the floodplain or jurisdictional wetland.
 Setbacks shall be measured in a horizontal direction outward from the ordinary high
- Setbacks shall be measured in a horizontal direction outward from the ordinary high water mark of the designated watercourse.

· Not to scale, graphic purposes only.

boundary of wetland

30' setback

The setbacks are derived using the Chagrin River Watershed Partner's model setback ordinance.

Designated watercourse: >1 sq. mi. - < 20 sq. mi. drainage area

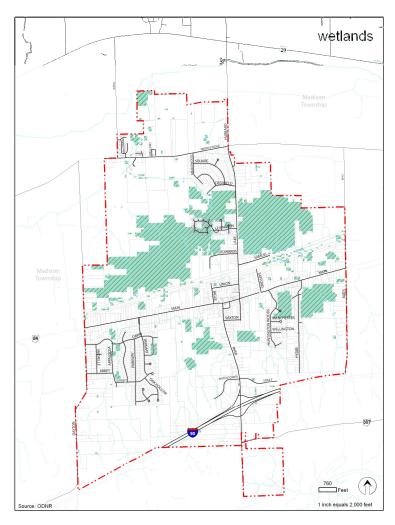
75' setback

Riparian setbacks should:

- Range from 25 feet to 300 feet depending on watercourse drainage area.
- Minimum distances and apply to both sides of designated watercourses.
- Conform to community land development patterns & natural resource management goals.
- Include provisions for communities to examine the combined impact of all setbacks (side yard, rear yard, riparian, etc.) in a subdivision or a parcel and make reasonable adjustments to ensure existing lots remain buildable, and to maintain lot yields from new subdivisions to the extent possible.

WETLANDS

Wetlands are important components for water quality and quantity. According the US EPA, wetlands provide water quality protection, fish and wildlife habitat, natural floodwater storage and reduction in the erosive potential of surface water. In Ohio, 90% of the original wetlands have been destroyed since the 1800s. Locally, development pressures have disturbed a large amount of natural wetlands.



Mitigation is

required for developers who disturb wetlands on site, but the creation of new wetlands often occurs outside of the watershed that has been impacted. A local wetland mitigation bank would be an extremely valuable asset for Madison Village and Lake County as a whole.

NONPOINT SOURCE POLLUTION

Nonpoint source (NPS) pollution comes from many sources in both urban and rural areas. Runoff from cropland, parking lots, lawns, mines, and septic systems often contribute to NPS pollution. Pollutants are transported to the surface and ground water by rainfall. During large storms, the runoff to surface water and infiltration to ground water increases, as does the rate of pollutant movement.

A large source of groundwater pollution comes from the overuse of agricultural chemicals. Fertilizers and herbicides, such as atrazine, are applied to fields to enhance crop yield. However, only limited concentrations of these chemicals are needed to be effective. Excess compound will remain in the soil, where they may degrade or

adhere to soil particles. Any compound remaining unattached to the soil will eventually travel to an aquifer.

Increasingly, NPS pollution originates from urban uses, such as suburban lawns and gardens, street and parking runoff, and construction sites. Urban areas often don't have enough vegetation to slow the rate of contaminant travel. This is evident in areas with high amounts of impervious surface, such as the US 20 corridor in Madison Township. This can lead to a faster contamination rate where more highly concentrated pollutants are transported into aquifers.

The Ohio Department of Natural Resources recommends using best management practices to reduce nonpoint source pollution. Best management practices are a management strategy that incorporates both engineering and cultural techniques that have been effective and practical in reducing water contamination. Best management practices include the timely and careful application of fertilizers and pesticides, the construction of filter strips surrounding fields that border a surface water source, and creation and protection of wetlands, which act as filters cleaning sediment, nutrients, and other NPS pollutants.

10.4 Soils

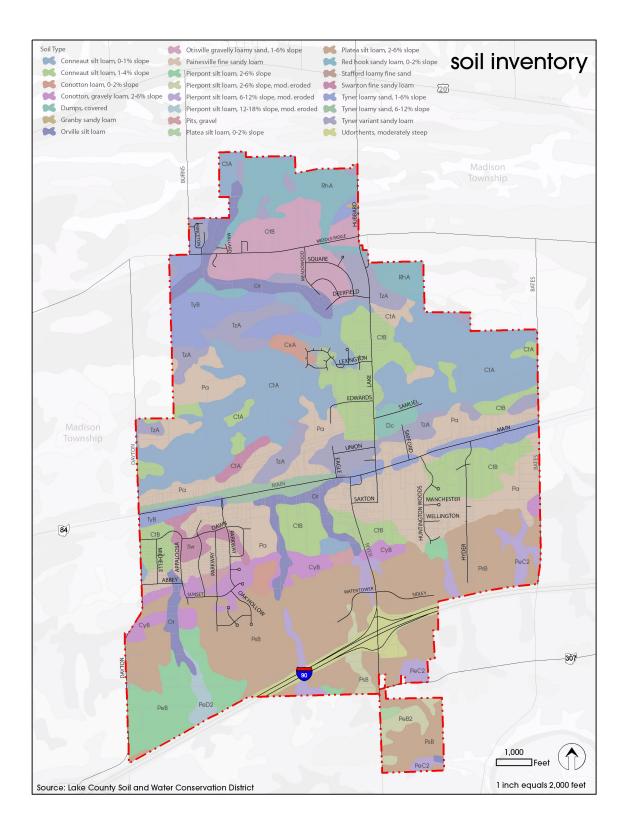
Soils maps of Lake County were prepared by the Ohio Department of Natural Resources in 1973. The maps show twenty-five different soils, including silts, loams, shales, sands, gravels and clays and indicate data on water tables, flood districts and slopes.

Madison's land conformation was influenced strongly by glacial action. Three distinct soil zones have formed from glacial till and lake deposits. The three soil zones are divided by ridges which once were beaches of the lake. The first zone lies between North Ridge Road/US 20 and Lake Erie, where soils are predominantly sandy, unstable, seasonally wet and susceptible to erosion. Arcola and Church Creeks flow through this zone and flood periodically. The soils (Tyner-Otisville) of the flood plains are rich silt or sandy loam.

North Ridge Road/US 20 stretches along a glacial ridge which forms the second soil zone boundary. Soils of this ridge south to South Ridge Road are sandy and gravelly, and were formed as beach deposits. A high water table, low moisture capacity, and rapid erosion are characteristics of the soils in this zone. This is a primary soil zone for Madison Village. Major soil types include Conneaut (CtA, CtB), Redhook (RhA), Otisville (OtB) and Painesville (Pa). This is primarily the agriculture region of the Village.

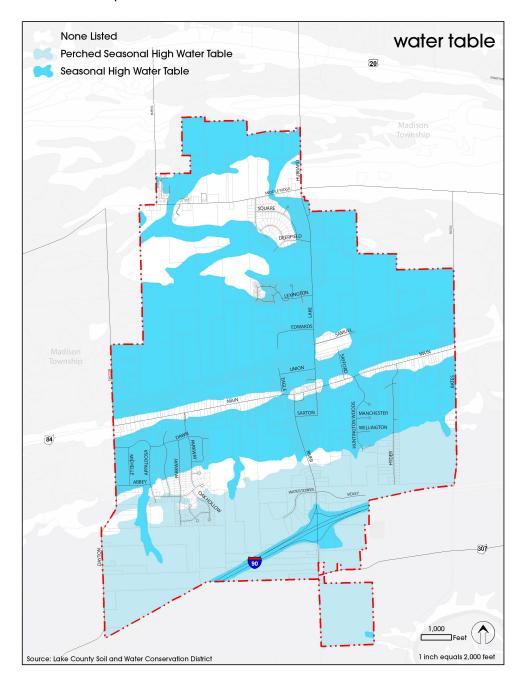
The third soil zone lies south of South Ridge Road. Soils here are quite different because the prehistoric lake extended only to the south ridge. The soils are silt and clay loam and weathered shales. A very high water table is present here as elsewhere and slow permeability, frost heaving and difficulty in working the soils are commonly encountered. Major soil types include Platea (PsA, PsB), Painesville (Pa), and Conneaut (CtB).

Three glacial ridges in the township (north ridge, middle ridge, south ridge) provide the only consistent relief from the high water table. The soils on all three ridges are composed of sandy beach deposits and are well drained with little water runoff.



GROUNDWATER AND DRAINAGE

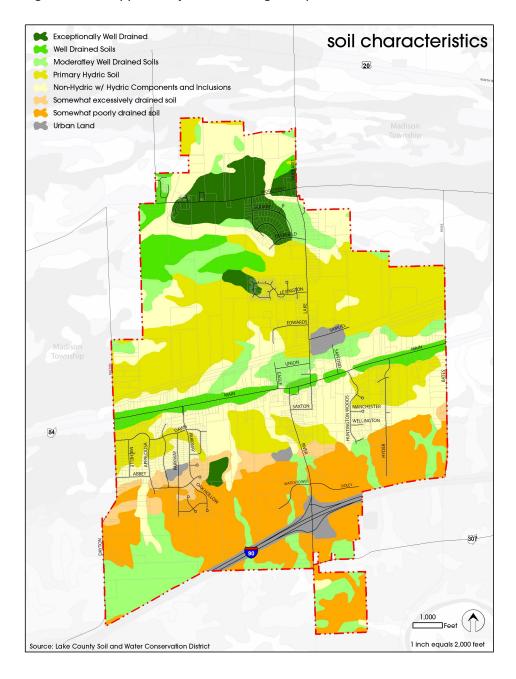
Ground water is water that saturates the voids, pores, fractures, and holes in the soil and rock at some depth below the earth's surface.



The ultimate source of all ground water is rainfall and snowfall. Part of the water that falls on the earth's surface seeps downward through the soil and collects in porous geologic formations. These formations act as sponges, and store the water. If these geologic formations are capable of yielding usable quantities of ground water to a well, they are considered aquifers.

There are two types of aquifers in Ohio; sand and gravel aquifers and bedrock aquifers. Ground water in sand and gravel aquifers occurs in pore spaces between individual grains of sand and gravel. In bedrock aquifers, ground water occurs in pore spaces and along fractures, joints, voids, and contacts between different formations. Groundwater in Lake County comes from both types of aquifers.

Most suburban areas in Lake County, including Madison Village, get potable water from municipal water supplies that are fed from Lake Erie, but the water supply for local agriculture is supported by wells and irrigation ponds.

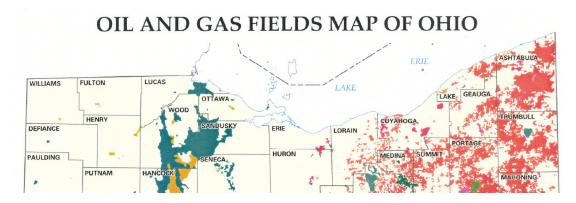


As indicated on the water table map, approximately 50% of the village has a seasonally high water table. Depending on the soil type, high water tables exist from

January through May at a depth of 0 to 1.5 feet. Drained or tiled areas may exhibit shorter time periods. Along the ridges, the soils are considered exceptionally well-drained, thus absent of the high water table designation. Conversely, areas with high water tables are hydric soils with moderate to poor drainage.

10.5 Oil and natural gas

The Oil and Gas Fields Map of Ohio indicates a large gas field in Madison Village. This area (red on map) is a combination of three different geologic profiles: Devonian Ohio Shale and Siltstone, Silurian-Devonian "Big-Lime" and Silurian "Clinton/Medina" sandstone.



According to the Ohio Department of Natural Resources, there are 1,410 oil and natural gas wells in Lake County, about 30 of which are in Madison Village, and 270 in Madison Township. (Many of the counted wells appear on DNR oil and gas township maps as existing, but generally are very old and have not been field verified; they may or may not exist.) 2007 ODNR records indicate 543 producing wells in Lake County.

Most of Ohio's 62,902 active oil and gas wells are classified as "stripper" wells or wells that produce less than 10 barrels (42 gallons/) of oil per day or less than 60,000 cubic feet of gas per day. The total production from wells in Madison Village or Madison Township is not tabulated.

Legislative changes in 2005 have largely exempted the oil and gas industry from local planning and zoning regulations. Community leaders may still provide comments on drilling activity during the permit notifications process that released by the Ohio Department of Natural Resources.

10.6 Treescape

A popular belief is that, before European contact, America was dominated by impenetrable, relatively uniform forests that cloaked the landscape. The reality was quite different. Pre-settlement forests were quite dynamic, shaped by a myriad of both natural and human-caused influences, disturbances and catastrophic events that had a profound effect on the age, plant species and wildlife of the forest

environment. Pre-settlement forests were a diverse mosaic of forest stands whose age, tree species and wildlife varied widely and reflected the disturbance history of the area.

The original forests covering the area that is now Madison Township and Madison Village were not pristine in the sense of being uninfluenced by humans. Native Americans in the area lived in fixed villages, and domesticated crops accounted for more than half of their diet. Thousands of acres were cleared for fields, and more was burned to improve game habitat, facilitate travel, reduce insect pests, remove cover for potential enemies, enhance conditions for berries and to drive game. It was a shifting type of agriculture. Fields and villages were abandoned when their natural fertility ran out, new forests were cleared, and the abandoned lands quickly reverted back to forest. In Madison Township, forests were cleared for farms and nurseries. As farmland was abandoned, forests slowly reclaimed the land.

The ecological subregion of Madison Village, as defined by the United States Forest Service, is: Humid Temperate Domain: Hot Continental Division: Eastern Broadleaf Forest (Continental) Province: Erie and Ontario Lake Plain Section.

The amount of land in Madison Village used for woodlots – a private area restricted to the growing of forest trees, specifically for building material or fuel – is not known. Lake County Cooperate Extension encourages sound woodlot management through educational programs and information sharing.

Many communities in the United States have tree preservation regulations. Under most tree preservation ordinances, site planning must consider the location of healthy, large native trees, and attempt to preserve them wherever possible. Trees subject to preservation cannot be removed unless they are replaced with trees of an equivalent caliper; for instance, a tree with a six inch diameter may be replaced with another six inch diameter tree, two trees with three inch diameters, or three two inch diameter trees, in addition to trees required by landscaping regulations.

Wooded land can still be developed with selective cutting of vegetation. However, many developers find it is more convenient to clear a site of all trees, to provide unlimited, easy access for construction vehicles. Tree preservation regulations can preserve the sylvan quality of the township, while still permitting development. Wildlife habitat is preserved, and the provided shade reduces energy costs. Privacy and home values are also enhanced. The village does not have tree preservation regulations. The village also does not have tree planting requirements for houses built on cleared land, such as former farm, nursery and reclaimed greenfield sites. The village should consider minimum planting requirements for new houses, to preserve forest cover, reduce the potential of urban heat islands, filter polluted air, and prevent soil erosion. Promoting urban forestry through mandatory tree planting requirements and municipal planting programs for public rights-of-way also has the benefit of protecting the local nursery industry.

10.7 Air pollution

According to the United States Environmental Protection Agency (EPA), Madison Village has one source of recorded commercial or industrial sources of toxic release inventory (TRI) pollutants; Chemmasters at 300 Edwards Street. Interstate 90 and the CSX/Norfolk Southern rail lines are additional sources of air pollution.

Increased tree cover, described in the treescape section, can help filter many airborne pollutants.

10.8 Noise pollution

Noise pollution in Madison Village comes from several sources, the most intrusive being heavy rail traffic along the CSX/Norfolk Southern corridor, and Interstate 90. As the population of the village grows, traffic on once-quiet rural county roads will increase, along with the resulting noise.

Commercial uses can be the source of constant noise, coming from car washes, loudspeakers and public address systems at gas stations and auto dealers, idling vehicles at drive-through windows, and loading areas and after-hours deliveries at supermarkets and big box stores. These uses are not prevalent in the village, but proactive adoption of regulations intended to regulate and buffer fixed point sources of noise – requiring large buffer zones, berms, and/or masonry walls between residential and commercial uses, especially loading areas, accessory car washes and trash enclosures; and/or restricting music and advertising at gas stations – can prevent the intrusion of unwanted noise into residential and environmentally sensitive areas. Noise pollution can be mitigated with sound walls; tree preservation and screening; conservation development in areas close to sources of noise, and large building setbacks from highways and loud industrial uses.

Noise pollution along I-90 and the rail corridor will be difficult to suppress. New residential development, and other types of development where tenants may find excessive noise to be a nuisance, such as nursing homes, schools and hospitals, should not be built near I-90 or the rail corridor.

10.9 Light pollution

Light spillover from development creates a nighttime glow above much of northeast Ohio, which many find to be unappealing. Light pollution also obscures clear views of the nighttime sky, an attribute often seen as a benefit of exurban and rural living. The sources of light pollution include poorly shielded lighting from commercial development – particularly auto dealerships, gas stations, and businesses with large parking lots that remain illuminated long after business hours – cobra-head style street lighting, sports facilities, and residential security lighting. Artificial light that is not properly directed downward can spill into the night sky and onto other properties, causing a nuisance to adjacent property owners. Madison Village has several sites that generate stray or excessive light; business parking lots with overly bright, poorly shielded under-canopy and pole lights on Lake Road and River Road, streetlights along most village roads, and poorly shielded outdoor lighting at residences.

Heavy foliage in some areas filters some stray artificial light, but light from taller light poles and lights in cleared areas can pass unblocked onto neighboring properties and into the night sky.

Curbing light pollution in Madison Village may not greatly improve views of the night sky, especially considering sources of artificial light in more heavily developed parts of the Cleveland metro area. Maintaining dark skies above the village will help

to preserve a semi-rural character that residents value. Lighting can be addressed through the implementation of requirements for light pole height, illumination levels, type of light, shielding, dispersal of light onto adjacent properties, and other elements in the village zoning code.

10.10 Goals and policies

Each primary paragraph (in bold type) is a statement of a goal. The subparagraphs are policies for implementing the goal. Some goals and policies related to land use are found in other elements.

- NR-1 Activities and land uses that could harm waterways and watersheds are strongly discouraged.
- NR-1-p1 Promote continued preservation and restoration of natural habitat areas and high priority sites, in conjunction with county, state, federal and local government agencies.
- NR-1-p2 Work with county, state and federal agencies to purchase or acquire easements or development rights to high priority sites and areas of outstanding natural significance, for restoration and/or preservation.
- NR-1-p3 Support appropriate uses along streams that limit their impact and protect the environmental qualities of these natural systems, including parks and open space that preserve native vegetation and tree cover, and carefully planned residential development, institutional uses, and civic uses that preserves natural features near streams.
- NR-1-p4 Promote conservation along streams through the location of parks, open space, floodplain preservation, requirement of forested buffers, and use of conservation easements.
- NR-1-p5 Encourage green construction practices that will reduce groundwater runoff, such as permeable pavement and green roofs.
- NR-1-p6 Require subdivisions and development sites to be designed so no building sites are located in a 100 year flood zone, and where other improvements avoid flood plains, wetlands and other riparian features wherever possible.
- NR-1-p7 Establish a minimum riparian setback requirement for properties adjacent to or near waterways, streams, wetlands and floodplains.
- NR-1-p8 Keep floodplains that are not used for agricultural purposes in a natural state wherever possible, to ensure natural functions are maintained and not compromised.
- NR-1-p9 Seek continued preservation and restoration of natural habitat areas and high priority sites in watersheds, in conjunction with county, state, federal and local government agencies.

NR-2 Appropriate soils will be considered in planning and development.

- NR-2-p1 Preserve areas with unique soils, or soils of local significance.

 Development in such areas should be minimally disruptive, with as little impervious cover as possible, and planned in a manner that allows agricultural uses to remain and continue.
- NR-3-p2 Discourage development on inappropriate sites, including areas with slopes that exceed 15%, and areas that are considered unsuitable for building and agriculture given the nature of the soils and underlying geology. Such areas should be set aside for public or private open space.
- NR-2-p3 Consider soil drainage in assessing development. Avoid poorly drained soils wherever possible in locating buildings, or address such constraints through building and site improvements.

NR-3 The treescape of Madison Village will be preserved and enhanced.

- NR-3-p1 Work with Lake County to implement development and design standards that promote preservation of healthy existing native trees, plants and groundcovers. Work with property owners and developers to consider alternative site designs to reduce tree loss in the development review process. Prohibit clearcutting of mature woodlots and forests, especially healthy second generation forests.
- NR-3-p2 Implement stronger landscaping requirements for residential, commercial and industrial uses. Encourage retrofitting older, otherwise barren commercial and industrial sites with landscaped areas.
- NR-3-p3 Expand urban forestry operations as funds become available. Urban forestry efforts should include planting of native trees, preferably those grown by local nurseries, in road rights-of-way, parks, and public land.
- NR-3-p4 Encourage sound management of woodlots. Work with local government agencies, Cooperative Extension, and other groups to educate property owners about sustainable woodlot management.

NR-4 Air pollution will be minimized.

NR-4-p1 Monitor state and federal legislation intended to improve air quality, and support as appropriate.

NR-5 Noise pollution will be minimized.

- NR-5-p1 Adopt design standards to address and reduce effects of noise pollution.
- NR-5-p2 Require the use of earthen berms, noise-reducing pavement, and/or other features that will reduce or eliminate effects of highway noise, without deflecting it elsewhere.

- NR-5-p3 Require buffering of residential uses located near sources of noise pollution, such using sound walls, berms, and existing and new vegetation. Residential development near Interstate 90 and the CSX/Norfolk Southern rail corridor should be sited or clustered to reduce or eliminate effects of highway noise.
- NR-5-p4 Discourage placement of noise-sensitive land uses, such as schools, hospitals and nursing homes, adjacent to major arterials, unless they are well-buffered to reduce effects of highway noise.

NR-6 Light pollution will be minimized.

- NR-7-p1 Adopt lighting standards to address and reduce light pollution. This includes using cutoff fixtures, lighting building and pedestrian spaces only, low-impact lighting of parking lots and gas station canopies, and reducing light generated during non-business hours.
- NR-7-p2 Substitute conventional light fixtures at village facilities and along village roads with fixtures that maximize light downward, eliminate stray light and reduce light, as they are replaced.

Appendix

TYPES OF TRANSFER OF DEVELOPMENT RIGHTS PROGRAMS

The most common transfer of development rights program allows the landowner to sell the development rights to a parcel located in a sending district to a developer, who then uses those development rights to increase the permitted development density on a different piece of property in a receiving district.

A second method allows a local government to establish a TDR bank to transfer development rights. In this method, developers, who wish to develop at a higher density than current zoning allows, would purchase development rights from the local government. The local government could then use these funds to purchase development rights of properties in areas that it wants to protect from urban development. The receiving area could not increase in density higher than a maximum set within the comprehensive land-use plan. The difference between the density with or without the TDR credits would be the permitted "bonus" that the developer could realize.

TDR COMPONENTS

There are four main elements that must exist in all successful programs:

- A designated preservation zone (the sending area).
- A designated growth area (the receiving area).
- A pool of development rights that are legally severable from the land.
- A procedure by which development rights are transferred from one property to another.

Without these components, landowners will have trouble finding a buyer for their development rights. The lack of a market for landowners who are mandated to sell their development rights to realize the economic development value of their property could be grounds for legal action. Under a voluntary TDR program, the lack of a receiving area would result in development occurring in the sending area just as before and with little land being protected.

INCENTIVES

Developers should have an incentive to purchase development rights. A TDR program must provide an incentive for the government to increase the building capacity within the receiving zones. This extra capacity is approved only after the developer transfers the development rights they own, or purchases those rights from landowners in the sending areas, or from a TDR bank. Ohio State University Cooperative Extension recommends that receiving areas should provide for about 30 to 50 percent more building units that the actual number of transferable rights would allow. This creates a competitive market among landowners wishing to sell development rights, and among developers needing to purchase those rights.

EXAMPLE

As an example, a nurseryman owns an 80 acre parcel in a zoning district that permits one residence on every two acres. The nurseryman can subdivide their property into 40 building lots.

A developer owns a 20 acre parcel in a zoning district that permits two residences per acre. Normally, the developer can subdivide the property into 40 building lots. However, the parcel is in a TDR receiving zone, where the maximum density is six units per acre when development rights are transferred from another property. If the developer buys the 40 development "credits" from the nurseryman's 80 acre parcel, they can build 80 units on the property.

Many communities provide density bonuses as an additional incentive to transfer development rights. With a 50% bonus, the 40 development credits from the nurseryman's sending parcel can be used to build 60 additional units on the developer's receiving parcel, for a total of 100 units.

TDR IN MADISON VILLAGE AND MADISON TOWNSHIP – THE COUNTRYSIDE PROJECT STUDY

In April 2007, TDR consultant Rick Preutz, in conjunction with the Countryside Project at Cleveland State University, drafted a report that studied the feasibility of a cross-jurisdictional transfer of development rights program that would include Madison Village and Madison Township.

Rather than establish fixed sending and receiving areas, as implemented in most TDR programs, the Preutz report recommends designating all land zoned A-1, A-R and S-1 in Madison Township and A-1 in Madison Village as sending areas – zones encompassing over 13,000 acres of land or almost one third the land area of the township and village combined – and receiving areas as land up-zoned (permitting additional residential density) after adoption of a TDR ordinance, and in conformance with the underlying comprehensive plan.

This study assumes a growth rate of 100 additional residential units per year or an increment of roughly 5,000 new units in the Township and Village by the year 2057, with 2,500 units built by developers who choose not to exceed the maximum density allowed by current zoning. Based on the receiving area assumptions, another 1,000 dwelling units would be within baseline density and therefore not subject to TDR requirements. The remaining 1,500 dwelling units are assumed to be within TDR receiving site projects and above baseline.

The 1,500 units are bonus units and would require one TDR unit each. The 1,500 TDRs could preserve 5,000 acres (7.8 square miles or about 2000 hectares) of farmland, habitat, natural areas and open space; about 16% of the combined land area of the township and village. Preutz suggests that other preservation techniques could supplement TDR including agricultural easement purchase programs and parkland acquisitions. If these other techniques protected another 1,000 acres, the area preserved by the combined techniques would represent 20% of the land area of the township and village; a percentage often used as a target for open space preservation.

From a fiscal standpoint, it could be costly to Madison Village if the bulk of land used as a sending area is located in the township, and the bulk of receiving land is located

in the village, unless there is a revenue-sharing agreement between the communities. Madison Village has only a very small commercial and industrial tax base. According to cost of service studies, agricultural, commercial and industrial uses pay more taxes than the cost of services they receive. For residential uses, generally the cost of services received is greater than the taxes paid. A cross-jurisdictional TDR program intended to preserve agricultural land in Madison Township could result in shifting a disproportionate amount of residential development to Madison Village. Without a sizeable commercial or industrial tax base to subsidize services required by residential development, the village could face an unfair financial burden. Even without TDR, residential development is continuing in the village without a corresponding increase in the commercial and tax base.

This plan recommends further study of the fiscal impact of a transfer of development rights program. If issues about the cost of community services resulting from a disproportionate level of residential development can be resolved, this plan recommends implementation of a TDR program per the Preutz/Countryside Project study. Otherwise, a TDR program should be implemented within the township, outside of Madison Village.

Recommended TDR sending areas should include parcels with an agricultural and green area zoning designation, and TDR receiving areas should include parcels with a residential zoning designation – particularly the North Madison area. A 25% density bonus is also recommended, to provide an incentive for developers and landowners to use transfer of development rights. An additional bonus is recommended when road frontage is preserved on the sending parcel. Sending parcels should be at least 20 acres.

MADISON VILLAGE RESPONSES TO SURVEY

The following are responses from township and village residents to the last question on the comprehensive plan survey. Some of the following responses have been edited due to database limitations, but they should capture the gist of the original response. Spelling, irregular capitalization and more glaring grammatical errors have been corrected. Comments critical of the planning process or land use regulation in general have *not* been edited. Comments dealing with issues not related to planning and the built environment (taxes, public safety, trash collection, township and village politics, criticism of named individuals, and so on) have been edited out. Not all respondents had additional comments.

- Make the southeast corner at south Lake and Main better in appearance.
- Red light at Lake and Lexington Boulevard.
- #6 Environmental Assets: check only three? All of these areas need the protection of informed, knowledgeable leaders.
- Need an overpass over railroad tracks at one of the crossings. Trains need to stop
 blowing there horns during middle of the night; wakes up whole village. Be more
 watchful of developers and builders who don't stand behind there finished products;
 this includes roads, right of way, drainage, sewers, green space, drainage ponds.
 Bring some big industry to industrial parkways.

- We definitely need more: (1) recreation facilities for all ages (2) more restaurants and stores so that we don't have to go to Mentor (3) more industry so that we do not have to drive so far to work. Thank you.
- I lived in Mentor before moving to Madison. I now hate going into Mentor because of the traffic and over development. I like the quiet more-rural feeling of Madison. I hope "growth and development" does not mean noise and traffic. I do think parts of Madison could use a "face lift" and some beautifying, such as the park located on Lake Erie down Hubbard Road.
- We both have talked about having a movie theater or opening our old drive-in. We
 must try to keep our children busy, to keep them out of trouble. A skating rink, puttputt, etc. Our YMCA is extremely expensive, especially for growing families. If there
 was activities families could afford, it too would help by giving the entire family
 things to do together.
- I'd like the zoning to be better planned. The City of Euclid is an example of thoughtful zoning. Heavy industry, light industry, commercial and residential areas are clearly defined and contained. That has not been the case in Madison. The enforcement of zoning and building codes is important to the healthy and successful development of our township and village.
- I believe storm water drainage and the roads themselves should be more of an issue than bike paths and trails.
- Use your common sense. Also, if Mentor is a typical suburb, I'd rather Madison be untypical!!!
- Please don't let us become another Mentor! While we need new businesses, and some new housing, to increase revenues, we are already facing way too much traffic on 528 and 20.
- Share philosophically. Not sure if Madison should become a city. 20 and I-90 interchange should be main business arteries Need a JEDD to be formed w/Township and Village.
- Need to bring businesses and industries to area which would increase jobs thus
 making people move into area. This would allow people not too travel, thus lowering
 gas usage.
- My family and I plan on staying in Madison Village for a long time as long as it doesn't become to over populated and built up. I enjoy the small town feel of safety and quietness.
- I'd like to see Water Towner Drive businesses developed. 2- More residential growth. That would bring in tax money for our Village 3- and keep our town Madison Village close to as it is.
- Government needs to find ways to eliminate waste, reduce costs, and explore "out of the box" ideas (such as regional government) to optimize use of existing revenue.

 Also, attract commercial and industrial business to improve tax base.
- Retain Historic Madison, farmland, scenic areas Travelers would be drawn to an Historic Madison and Lake area increasing bus tours, visits to wineries, etc. More

financial input for local business. Also to tour Madison Historical Society Museum or Middle Ridge and Rabbit Run, Arcola Estuary and site of ship building and Arcola furnaces. We have a lot to offer in Madison.

- The recent flooding this year highlights the need for controlling land usage.
- General lack of entertainment. Would like a movie theater, more restaurant variety.
 We need an overpass for railroad tracks.
- I like living in Madison. I came here and bought a condo 29 years ago so it's perfect for me. The only reason I came here was to be near my aged mother, who has now passed away. I was working in Mentor at that time, but I wanted to take care of mom.
- No strip malls and unsightly, littered yards to be cleaned up by owner; particularly one on 528 across from Y. Its an eyesore to passerby!
- A "plant a tree or shrub" program. Residents can obtain trees and shrubs, free, for individual use, from the Internet.
- Work together with Township and Village.
- We need a bike land and sidewalk along Middle Ridge Road from 528 to the library. It's time for sewers (sanitary) in Squares Acres.
- The two governments need to either merge, or get on with building another middle school in the Village for village zoned kids! Busing them and crowding them, is not fair to them. Some separate zoning regulations are both unfair and vague and bring no regular incomes to either government sector! Taxpayers are tired of the overloads! Bring in more retail businesses and both industrial and commercial! Maybe a movie theater! Taxes for undeveloped utility areas should not be as high as those who have the availability of all the utilities! Give those without gas, water, or sewer a break! We need more sidewalks everywhere in both village and township! Walking has become very hazardous! There should be cleaner and more developed businesses at I-90 ramps.
- Route 528 from Route 84 to Route 20 needs a turning lane. Also, railroad tracks on route 528 need an over or under pass.
- Our biggest drawing cards are Western Reserve appeal and interesting historic past. Tourism should thrive. How about a welcoming station? How about carriage rides for visitors, or anyone?
- Need to enforce quiet zones unable to open windows in summer at night because of train whistles. I don't think they need to do this at 3:00 a.m. Noisy ATVs on vacant lots behind our housing development.
- The tax base needs to change. Maybe if the nurseries (I feel there are not real working farms: my definition dairy) kicked in more money it would help the tax base. Without an influx of new tax dollars from someone other then the home owner we could catch what Ashtabula County as urban blight.
- Don't stop growth. This is an inconvenient place to live!

- More high end shopping and restaurants. Industry to increase the tax base. Increase sewer capacity. Even if farmers don't want it. If they don't want development they should not sell their land. Same with water. It is up to them. Forget the pizza shops, used car lots. Bring in something with class. With the "We don't want to be like Mentor" mentality, we won't get anywhere. Outside the commercial area Mentor is very nice. They have a larger tax base as does Perry.
- Cut the "small town" politics and work to improve the quality of the town by bringing economic growth and providing "good paying" jobs and shopping right here. Do this and many other problems will solve themselves.
- On Route 20 going east in front of Pebbles should be a lane turning left or north. I think this would keep the traffic flowing better. Sometimes that right lane is backed up all the way past the fast food restaurants.
- Landscape the entire roadside (Route 20) in front of Wal-Mart.
- What is considered to be small lots or large lots. Our zoning in the Village has and been good. The only thing our traffic flow has increased to a point that the safety of our people and services will also increase. This must be in the new comprehensive plan for the future.
- Madison needs a better tax base from industry. There needs to be incentives to bring new business and industry to this town and also keep existing ones here. This will lessen the burden on the homeowners. Why have so many mfg. companies left Madison in the last 10 years? Network with other area communities to see what they've done to build a better community.
- Question 7 doesn't have an acceptable answer. We want large lots with green space.
- Have to, just have to develop I-90 interchange. I've seen numerous cars or trucks exit, look both ways and get back on the freeway taking money somewhere else. We are also in dire need of name brand restaurants, both Village and Township. We love Wal-Mart and love not having to go to Mentor or Ashtabula. Bring on the home improvement stores, too.
- Village and Township should become one entity.
- We could use a chain restaurant or two in the village. Water rates are rather high. We could use more than one cable system to lower rates.
- One of the drawbacks from living in the village is the noise from the passing trains and their sirens, especially during the nighttime hours. Is anything being done to pursue the "Quiet Zone" enforcement? There are enough restaurants in the village, but it would be great to have one a bit more upscale, perhaps combined with a motel at the I-90 interchange, which is sorely needed.
- Having lived in Mentor and Painesville Township for most of our lives, we love the small town feel of Madison Village. With that said, we believe additional housing is needed. We also would love to see more businesses (especially dine-in restaurants)

along the Route 20 corridor and the I-90 interchange to help the tax base.

- Madison needs to develop a business tax base instead of raising taxes on households. Also, I believe someone who knows how to handle community money needs to be hired. The village has increased its tax base quite a bit due to the newer, more expensive homes being built and the influx of out-of-town families moving in. However, we have lost services that were some of the reasons these people located here. (ex. recycling pick up, trash pick up, police officers etc.)
- The over-riding concern of future development must be recognition of the high water table and the need for storm water control and drainage.
- The businesses by I-90 need tall tasteful signs to pull people from 90 to our businesses. If they are not allowed a sign that is visible from Rt. 90, they will lose lots of business.
- Madison is a very good place to live! Please do not ruin that by adding more taxes
 and making the village a police state (some honesty in office would be good also). I
 do not want a Mentor atmosphere we can drive 20 min to get to almost anything
 but I would like to see current buildings (Tops) utilized to give more of a choice
 (Target)? Please address amount of police in village people do not want to shop
 there, way too many tickets.

Convert Squares Acres septic system to all sewers! More sidewalks! Especially in Squares Acres development Movie theater would be a hit! Something to do as a family. Batting cages for the children. Family oriented restaurants: Applebees or Outback Steak House